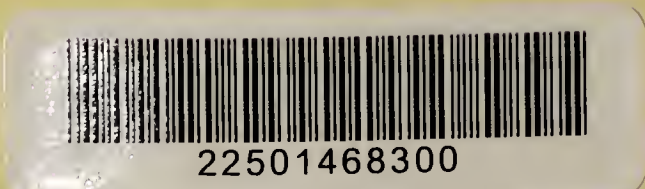


BRITISH HONDURAS
ANNUAL MEDICAL AND SANITARY REPORT
FOR THE YEAR ENDING
31ST DECEMBER, 1938.

PART I.

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BRITISH HONDURAS.

Medical Department,

Belize, 10th June, 1939.

Sir,

I have the honour to submit, for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State, the Medical Report of the Health (Part I.) of the Colony of British Honduras for the year 1938.

I have the honour to be,

Sir,

Your Obedient Servant,

R. L. CHEVERTON,

Senior Medical Officer.

The Honourable,
The Colonial Secretary.

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**BRITISH HONDURAS
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I. Administration.

(a) STAFF.

The staff consists of a Senior Medical Officer and eight Medical Officers—two for Belize and one for each of the Districts of Corozal, El Cayo, Orange Walk, Stann Creek and Toledo, and one supernumerary, who is always on leave of absence.

The Senior Medical Officer is allowed consulting practice.

The Medical Officers are allowed private practice in accordance with the regulations for Colonial Medical Service, except in Belize.

The European Nursing Staff, assisted by locally recruited nurses, consists of:—

- (a) A Matron, Belize Hospital.
- (b) A Nursing Sister, Belize Hospital.

Dr. P. E. M. Clarke arrived in the Colony on 30th May and assumed duty as Medical Officer Orange Walk on the 4th June. A new appointment.

Dr. T. Patterson, Medical Officer El Cayo, was absent on leave from 1st January to 4th April. Dr. Patterson was transferred to Corozal on the 8th April and assumed duties as Medical Officer of that District on the 9th April.

Dr. D. W. Degazon was absent on leave from 24th March to 2nd October.

The duties of Medical Officer, Corozal, were performed by Dr. D. W. Degazon, Medical Officer, Orange Walk in conjunction with his own duties from 1st January to 13th March, and by Dr. Rassim from 14th March to 8th April.

The duties of Medical Officer, Orange Walk, were performed by Dr. T. Patterson, Medical Officer, Corozal, in conjunction with his own duties from 9th April to 3rd June.

Miss Mary Paterson arrived in the Colony on the 25th July and assumed duty as Nursing Sister, Belize Hospital. A new appointment.

Medical Staff.

Senior Medical Officer.

R. L. Cheverton, M.R.C.S. (Eng.), L.R.C.P. (Lond.).

First Medical Officer.

V. F. Anderson, M.D., B.S., D.P.H. (Lond.), M.R.C.S. (Eng.), D.T.M. (Liverpool).

Medical Officers.

T. Patterson, M.B., Ch.B. (Oxon.).

W. A. S. George, L. R. C. P. & S. (Edin.), L. R. F. P. & S. (Glasgow).

E. C. Savona, M.D. (Malta), D. T. M. & H. (Eng.).

L. M. Ram, M.D., B.S. (Punjab), M.R.C.P. (Edin.), D.P.H. (Lond.).

D. W. A. Degazon, M.B., B.S. (Lond.), M.R.C.S. (Eng.), L.R.C.P. (Lond.).

H. S. Rassim, M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.R.M.E.

European Nursing Staff.

Matron, Public Hospital Belize.

Miss L. M. Roberts, S.R.N., M.B.E., S.S.St.J.J.

Nursing Sister, Public Hospital Belize.

Miss M. Paterson, S.R.N.

(b) LEGISLATION.

The following amendment to Public Health Legislation was passed:—

Ordinance No. 23—An Ordinance to amend the Public Health Ordinance—Chapter 53 of the Consolidated Laws, 1924, and to transfer from certain authorities to the Senior Medical Officer powers and duties with respect to health and sanitation throughout the Colony for the purposes connected therewith.

(c) FINANCE.

In this section the figures all refer to the year ending 31st December, 1938.

Receipts, Hospital and Asylum Fees		\$6,472.50
Expenditure, Personal Emoluments	\$51,495.74	
Other Charges	46,174.00	\$97,669.74

The institutions in respect of which the expenditure was incurred were as follows:—

Institutions and Average Daily Number of Inmates.

Belize Hospital	67.00
Poor House	43.00
Lunatic Asylum	59.00

District Hospitals.

Corozal	9.88
Cayo	7.50
Orange Walk	4.60
Stann Creek	20.30
Toledo	10.90

The expenditure on dietary is shown in the following table:—

	Total expenditure	Average daily number of Patients	Cost per head per diem.
Belize Hospital	\$5,849.09	67.00	\$ 0.18
Lunatic Asylum & Poorhouse	7,245.80	102.00	0.18
Corozal Hospital	1,158.08	9.88	0.20
Cayo Hospital	727.41	7.50	0.21
Orange Walk Hospital	640.33	4.60	0.20
Stann Creek Hospital	1,705.92	20.30	0.20
Toledo Hospital	776.35	10.90	0.21

II. Public Health.

(a) GENERAL REMARKS.

The health of the Colony on the whole is satisfactory, although there has been a decline in the economic condition of the people during the latter half of the year; however, no obvious alteration in the nutritional state of the children was evident.

There has been a considerable increase of admissions to the various institutions owing to a continued confidence shown by the people and a re-awakening of the Department to its multitudinous responsibilities.

The diseases which have occupied the attention of the Department during the year under review, are Malaria, Venereal Diseases, Helminthiasis, Bronchitis and Broncho-Pneumonia, Pulmonary Tuberculosis, the Dysenteries, Malnutrition and Mycodermatitis.

Unfortunately little attention has been given in the past to proper recording of diseases found in the Colony. In order to rectify this error and to obtain figures which may reveal some interesting facts after the system has been working for several years, the Medical Officers now send in monthly returns of the number of diseases treated (both indigent and private patients) also details are kept of all patients seen in the Belize Out Patients' Department. The system is based on the International List of the Causes of Death; the returns for the year under review only cover a period of nine months.

Malaria continues to be a economic problem and the policy instituted during the year of free distribution of Quinine to infected school children and labourers on the various road works, has had very encouraging results. In a country so inundated with water, the wider distribution of quinine would appear to be the first line of attack on this problem.

Veneral Diseases are very prevalent. A more concerted effort has been made during the year to look into this social problem, but it is realized that we are but scratching the surface. The incidence of syphilis is very high as is evident by routine Kahn reactions of all admissions to the Belize Hospital; at times, it reaches 90%. The Department, however, is unable to expand its activities in this direction owing to lack of Medical Staff and trained orderlies. Furthermore, the public would appear to be unaware of the seriousness of these diseases.

Helminthiasis. Most of the children are affected with worm infestations which, at times, assume an alarming clinical picture. No detailed survey has yet been carried out as to the exact incidence of the various types of worms, but the District Medical Officer in Corozal is making a detailed examination in his area.

Bronchitis and Pneumonia have been very prevalent towards the latter half of the year. The bronchitis was especially prevalent amongst the children and the condition was aggravated by a widespread outbreak of Whooping Cough. The incidence of Pneumonia was comparatively high and the mortality rather alarming. No doubt, climatic variations were contributory factors.

Pulmonary Tuberculosis did not show any outstanding variations. A survey of the school children was made by Dr. Wells of the Rockefeller Foundation early in the year, and his report is to be found as Appendix I. A closer contact is being made with all known cases in Belize and Districts, and certain families are being kept under observation. The purchase of a pneumothorax apparatus has been useful in treating the few early cases reporting for treatment in Belize.

The Dysenteries appeared as sporadic cases in all institutions and districts. There appears to be a higher incidence of amoebiasis than the bacillary type of dysentery.

Malnutrition of various degrees is recorded in the various hospitals chiefly associated with deficiencies of Vitamin B2, but other forms of avitaminosis are also seen. No cases of starvation are reported but marasmus is seen from time to time amongst the children due to careless attention of the mothers. Several cases were found to be syphilitic in origin.

The report of the Committee on Nutrition was published in November and was well received both inside and outside the Colony. It is obtainable either through the Government Printer or the Crown Agents at the price of \$1.00 or 5/- respectively. In it certain suggestions for future policy are submitted for consideration.

Mycodermatitis is very prevalent amongst all classes of the population and occasionally assumes sufficient proportion as to have a crippling effect on the individual. There is a wide range of skin diseases in this Colony and any research into this subject would form an interesting clinical study. The high percentage of humidity is, no doubt, an important factor.

The Senior Medical Officer's tours included an extensive visit to the Mahogany camps and workings along Mexican-Guatemaltecan frontiers. Visits were made to Hill Bank and the villages of the Corozal Districts thus completing a tour, begun in 1937, of almost every village and settlement in the Colony.

Sanitation and the control of Sanitation leaves much to be desired and schemes are being evolved for a more energetic programme with complete control being placed in the hands of the responsible Department.

Royal Commission. The Senior Medical Officer was given the opportunity to place a memorandum before the Royal Commission and to be heard in person. Many problems were discussed including training of subordinate staff, travelling medical units, travelling dentist, District Nurses and Midwives, abolition of private practice, charlatans, Contributory and Health Insurance schemes, conditions of labour, increase of medical personnel, various prevalent diseases, such as Malaria, slum clearance schemes, control of sanitation and a more energetic health programme.

First Aid Lectures were given by the Medical Staff to the Police and Defence Force, who later sat for the St. John Ambulance Association examination with

very satisfactory results. Lectures on First Aid and Hygiene were also given to the Boy Scouts. In conjunction with the Education Department, the Senior Medical Officer gave a series of lectures to the Teachers on Hygiene.

A Contributory Scheme was instituted by the Belize Estate and Produce Company; the sum of \$1,200.00 was contributed to the salary of the Medical Officer at Orange Walk on condition that at least two visits a month were made to the Hill Bank mahogany camps.

New Belize Hospital plans were placed before the Secretary of State for consideration.

Sickness amongst Government Officials—The incidence of sickness is unknown as European and locally recruited officials are treated by private practitioners who may or may not be Government Medical Officers. No records are kept.

The Outdoor Relief Committee continues to function under the Chairmanship of the Senior Medical Officer. Details of expenditure etc., are as follows.

TABLE 1.

AMOUNT SPENT ON OUT-DOOR RELIEF.

Amount in Dollars

Year	Belize	Corozal	Orange Walk	Stann Creek	Toledo	Cayo	Total
1931	1,897.39	96.25	206.00	125.50	150.00	57.00	2,632.14
1932	3,891.15	77.50	216.39	225.25	189.75	115.00	4,715.04
1933	4,865.00	114.50	144.00	259.75	187.14	214.00	5,815.39
1934	5,944.32	295.34	133.50	259.39	199.71	269.00	7,111.76
1935	8,638.69	428.08	209.50	252.95	254.76	296.50	10,081.48
1936	8,589.56	266.50	214.32	231.50	162.50	263.50	9,727.88
1937	8,488.50	147.50	150.15	288.10	93.92	254.00	9,422.77
1938	9,101.91	151.25	124.50	328.40	155.96	260.00	10,122.02

NUMBER OF PERSONS ON OUT-DOOR RELIEF.

Year	Belize	Corozal	Orange Walk	Stann Creek	Toledo	Cayo	Totals per year
1931	96	2	6	4	5	4	114
1932	125	2	6	5	4	2	144
1933	175	6	7	4	5	6	203
1934	258	13	4	4	6	6	291
1935	358	13	10	5	8	8	402
1936	320	13	9	5	8	9	364
1937	325	11	11	8	9	12	376
1938	362	7	13	17	10	9	418

(1) GENERAL DISEASES.

Relapsing Fever—3 cases in Belize.

Cancers—59 cases were notified.

Diabetes Mellitus—27 cases were reported.

Deficiency Disease—Scurvy 28 cases, Pellagra 28 cases, Rickets 77 cases.

Leishmaniasis—221 cases were reported.

Pneumonias—255 cases admitted to the various hospitals.

Tetanus—4 cases admitted to Belize Hospital.

Rabies—2 cases in Belize.

(2) COMMUNICABLE DISEASES.

(a) *Mosquito or Insect-borne.*

Malaria—The deaths from this disease during the last three years are as follows:—

1936—91 deaths or 0.1% of living population.

1937—60 deaths or 0.1% of living population.

1938—75 deaths or 0.1% of living population.

The number of cases of Malaria admitted to the public Hospitals in the Colony during the last three years are as follows:—

	1936	1937	1938	
			Number of cases.	Percentage of total Hos- pital cases.
Belize	289	245	273	15.6
Corozal	138	94	39	19.7
Cayo	59	41	52	27.1
Orange Walk	88	57	25	32.9
Stann Creek	165	167	214	44.0
Toledo	108	154	47	25.3
Total in the Colony	547	758	650	
Percentage of Total Hospital Cases	21.5	23.7	22.53	

The type of parasite most commonly encountered is the subtertian or aestivo-autumnal.

The vector or vectors of malaria, their habit and habits are unknown in British Honduras but *Anopheles Albimanus* is, from its geographical distribution, thought to be the principal vector.

Black Water Fever. Twelve cases were reported; nine cases in Stann Creek with one death, one case in Cayo and four in Belize.

Yellow Fever. The last recorded case was in 1921. Viscerotomes have been purchased through the Rockefeller Foundation from Brazil and issued to each district for the purpose of obtaining sections of the liver without autopsy. Arrangements have been made with Dr. Hoffman of the Findlay Institute, Cuba, to make pathological sections. Several specimens submitted for examination have proved to be negative. The department is fully alive to the possibility of 'bush' yellow fever.

(b) *Epidemic and Infectious Diseases.*

Enteric Fever. Nil.

Dysenteries. Both amoebic and bacillary dysentery occur, the former chiefly along the Belize River area. 242 cases were treated in the public hospitals with 10 deaths.

Tuberculosis. Certified deaths from this disease are as follows:—

1936—48 deaths or 0.08% of living population.

1937—29 deaths or 0.05% of living population.

1938—28 deaths or 0.04% of living population.

51 cases of Tuberculosis (all types) were treated in the hospitals as compared with 49 the previous year.

Venereal Diseases. The incidence of these diseases is very high indeed. A special clinic for treating Syphilis was opened in Belize during the year under review and 1456 cases were treated. Owing to lack of medical staff, no propaganda is being carried out to encourage patients to report for treatment, but in spite of this, the number shows a steady increase. This is a social problem which is in need of energetic measures to control it.

Gonorrhoea, urethritis, epididymitis, arthritis, salpingitis and conjunctivitis are common.

Soft chancres are seen. Lymphadenoma inguinale with inguinal ulceration and granulomata of the rectum and vagina are not uncommon.

Small Pox. 88 cases of Variola (Alastrim) were reported. The outbreak in San Antonio, Cayo, was imported from across the frontier. The same applies to the outbreak in San Roman, Corozal.

The number of successful vaccinations under the age of five is as follows:—

	1937	1938
Belize	428	588
Corozal	170	228
Cayo	80	425
Orange Walk	137	97
Toledo	128	367
Total for the Colony	1032	3546

The figures for the past four years are:—

1935	1,101
1936	857
1937	1,032
1938	3,546

It will seen from the above figures that a more concerted effort has been made in vaccinating the population. It was very disturbing to find that 32.30% of the Belize school children were unvaccinated.

Diphtheria. Three, cases, with one death, were admitted to Belize Hospital: purely sporadic in origin.

Leprosy. One suspected case was seen, which no longer resides in the Colony.

Mumps. An extensive epidemic broke out in the schools and eventually attacked the adult population. The first case was reported from Corozal.

Whooping Cough. A bad outbreak occurred amongst the children of all ages during the latter months of the year, but fortunately the mortality rate was low.

(c) *Helminthic Diseases.*

These are a source of chronic ill health amongst the children. The Medical Officer, Corozal, in a preliminary survey examined 459 stools and found the most common varieties of worms to be *Ankylostomia Duodenale*, *Ascaris Lumbricoides*, *Trichuris trichiura*. A general survey in each district would be an interesting and valuable piece of work.

(b) VITAL STATISTICS.

The population at the end of the year was estimated to be 57,767.

The average Birth Rate of the Colony is 35.5 per 1,000 of the estimated population. The birth rate is highest in the Toledo District and lowest in the Stann Creek District. The death rate is highest in the Toledo District and lowest in the Cayo District.

Registration of births and deaths is compulsory. There is no registration of still births.

The Medical Department, in conjunction with the Registry, is insisting on the notification of deaths as laid down in the 1929 International List. The returns are examined by the Medical Department each month and any ill-defined diagnosis is returned to the Medical Practitioner for his further consideration. The Police are being discouraged from giving death certificates, except in places where a Medical Practitioner is not obtainable.

The return of Deaths for 1938 shows that only 45.7% of the total deaths are certified by Medical Practitioners.

Infantile Mortality.

The Infantile Mortality rate is 125.2 per 1,000 as against 122.6 last year. It is highest in the Toledo District and lowest in the Cayo District.

III. Sanitation and Hygiene.

(i) ADMINISTRATIVE.

There was a Central Board of Health in 1938 for the entire Colony, consisting of seven members. The Senior Medical Officer is Chairman of this Board and Medical Officer of Health for the Colony. In actual practice, the onus of sanitary work rests on the Senior Medical Officer.

The Colony is divided into six districts, each with a Local Authority. The Local Authority for the town of Belize is the Town Board of Belize.

In each of the Districts, the Medical Officer is the District Medical Officer of Health; but, owing to the District Commissioners being chairmen of the Local Authorities, a very unsatisfactory state of dual control existed.

This unsatisfactory state of affairs was finally concluded on 9th November when a Bill entitled "An Ordinance to amend the Public Health Ordinance—Chapter 53 of the Consolidated Laws, 1924, and transfer from certain authorities to the Senior Medical Officer—powers and duties with respect of health and sanitation throughout the Colony and for purposes connected therewith" was passed. This Bill provides for the formation of an Advisory Committee appointed by the Governor and came into effect on the 1st January, 1939.

(ii) PREVENTIVE MEASURES.

(a) *Mosquito and Insect-borne Diseases.*

Malaria and Yellow Fever. Closer attention has been given to mosquito breeding. The introduction of proper knapsack sprays and the use of special anti-malarial oil has speeded up the control of larvae breeding in Belize. Larger areas have been dealt with at regular intervals.

The reclamation scheme and drainage of streets in Belize has also helped to reduce the mosquito breeding index. However, effluent domestic water which is allowed to flow into the drains, which have such a slight gradient, adds to the work of mosquito breeding control.

Crab holes are still possible sources of mosquito breeding. Cyanide gas is used during the dry season and successful results have been obtained with a mixture of Paris Green and Lime. Paris Green is not generally suitable for antimalarial work in this Colony.

Vats are fished with larvivorous fish; but the results of a careful check up shew that the mortality amongst the fish is very high, therefore this measure gives a false sense of security.

At the moment no active anti-amaryl measures with regard to aeroplanes from Guatemala, Honduras and Mexico have been adopted apart from the passengers reporting at the Hospital. With the establishment of a permanent airfield, the whole question will come up for a full review.

The proposed reclamation scheme with a suction dredger will be a distinct asset to Belize in the first instance and later to the Districts. At the present time it is impossible to cut back the bush which immediately abuts on the towns owing to the likelihood of increasing the breeding potentialities of *Anopheles Albimanus*; but by the process of cutting and filling in, the bush will be gradually pushed back to a reasonable distance from the houses.

Under the present reclamation scheme, the Department is recommending that an area of at least half a mile around the town of Belize should be left as an open space, that pastures should be established for cattle, thus giving the anopheles a blood food; in addition a belt of Eucalyptus and Maritime Pines be intercepted as a barrier between the bush and the pastures.

It is also proposed that any further development of the Belize Town should be along the coast both north and south and not more than two streets deep, in order that full use may be made of the prevalent breezes, thus helping to eliminate all types of mosquito and fly pests which are a great source of annoyance quite apart from any pathological significance.

When the suction dredger has completed its work in Belize, attention will be given

to such places as Stann Creek and Monkey River, the latter township being in a deplorable condition.

It is hoped to introduce into certain of the larger towns and villages the type of invert drains used in the Panama Canal Zone, many of the small creeks in and around these inhabited places are badly in need of attention.

As has already been mentioned, the exhibition of Quinine amongst the school children has done much to raise the school attendances and to help eliminate certain possible sources of re-infection. Later, it is hoped to place cheaper quinine on the market for the use of the Public.

It is interesting to note in Stann Creek Valley where the spleen rate is up to 90% amongst the school children, how well these children attend school in spite of their splenomegaly.

(b) *Epidemic and Infectious Diseases.*

Dysentery: Faulty methods of disposal of excreta, wells unprotected against surface water contamination, the use of certain rivers, creeks and water holes for drinking water are all contributory factors. In Belize, fly contamination from the primitive methods of conservancy is the incriminating agent.

Small Pox: Alastrim is the only form seen, occurring in small epidemics and sporadic cases.

Regular vaccinations are carried out by Medical Officers and Public Vaccinators in all towns and villages.

Tuberculosis: Disinfection of the room in which a person dies is carried out by a Sanitary Inspector. This disinfection is often difficult owing to the bad state of repairs of many of the houses in the towns. Accommodation in 12 single huts is available at the Poor House for destitute sufferers. This system is very unsatisfactory and is not viewed favourably by the public. A person known to be suffering from Tuberculosis is ostracized by his relatives. However, provision will be made in the new Belize Hospital for treating early cases of Tuberculosis and a more energetic follow up method will be instituted if and when the medical and nursing staff is increased sufficiently to deal with the extra work facing the Department.

Mumps: An extensive but not serious outbreak of Mumps attacked the school children during the latter quarter of the year.

Whooping Cough: An epidemic broke out in the towns and later spread to all the villages; although very extensive, the mortality was not heavy.

Rabies: In March an outbreak of Rabies broke out in Belize. The Muzzling Order was invoked and all unlicensed dogs were rounded up and destroyed. As a result of the Muzzling Order, certain owners of dogs removed their animals to the districts, further restrictions were then enforced, but not before several dogs became rabid in Stann Creek and Punta Gorda. In the latter place the disease spread to the horses and cattle.

(c) *Helminthic Diseases.*

Owing to lack of funds, no concerted effort is made to combat Ankylostomiasis and allied conditions, but the Medical Officers in their tours dispense worm oil to the villagers. The incidence of the various helminths is unknown. Heavy infestation with *Taenia Solium* is sometimes seen in slaughter-houses. *Bilharzia* is unknown.

Pit latrines are being demonstrated and bored hole latrines are being considered; however, it will take several years to alter the habits of the people and until their ideas are altered there is no chance of combating the helminthic diseases, which form so large a part of the ill-health of the people of the Colony.

(iii) GENERAL MEASURES.

(a) *Housing.*

As has been mentioned previously, much work has been done to raise the level of building sites and a scheme is already under way for reclaiming larger areas of bush ground around various towns, principally Belize.

During the year a survey was made of 764 houses in Belize and a table of findings is shown opposite.

TABLE II.

HOUSING SURVEY.

HOUSING DEFECTS	No. 1 District Number of houses 193		No. 2 District Number of houses 144		No. 3 District Number of houses 299		No. 4 District Number of houses 128		Average percentage of all four districts		Actual percentage of Total 764 houses	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Overcrowded Houses ..	116	60.1	127	88.1	120	40.1	61	47.7	59.1	424	55.5	
Faulty Ceilings ..	82	42.5	62	43.1	85	28.4	2	32.8	36.7	271	35.4	
Damp Houses ..	29	15.0	62	43.1	73	24.4	11	8.6	22.8	175	22.9	
Houses in need of repairs ..	83	43.0	82	56.8	84	28.1	42	25.0	38.2	281	36.8	
Houses with bad Latrines ..	99	51.3	7	4.9	38	12.7	66	51.6	30.1	210	27.5	
Houses with no Latrines ..	64	33.1	60	41.7	72	24.1	19	14.8	28.4	215	28.1	
Shacks used as Kitchens ..	70	36.3	70	48.6	48	16.1	24	18.8	29.9	212	27.7	
Bedrooms used as Kitchens	8	4.1	3	2.1	11	3.7	—	—	2.5	22	2.9	
Bedrooms used as Bathrooms	103	53.4	81	56.2	179	29.9	57	45.5	53.5	420	54.9	
Kitchens used as Bathrooms	48	24.8	49	34.0	43	14.4	40	31.3	26.1	180	23.6	
Houses with inadequate water supply ..	69	35.8	29	20.0	57	19.1	31	24.2	22.3	186	24.3	

Districts Numbers 1 and 2 are on the South Side of the Town, divided by the Southside Canal.

Districts Numbers 3 and 4 are on the North Side of the Town, divided by the Northside Canal.

No survey has been carried out in the districts, but similar conditions exist to those in Belize.

The town of Belize is overcrowded with regard to houses per lot, and the number of persons living in the houses. The Department has been considering this question since April 1937. A committee was appointed by the Government to consider the question of the worst areas. Legislation is under consideration for dealing with the many defects. This slum clearance scheme, however, is closely linked up with the reclamation scheme, because land will have to be found and houses built before the areas can be cleared of buildings and the occupants re-housed. Inasmuch as the streets of Belize are narrow, and there is an increase of traffic, it would be preferable to leave the slum areas as open spaces when the houses are demolished.

A demonstration house built of coral and cement blocks was erected by the Public Works Department; naturally the cost of a single building is high, but a larger scheme would cost proportionately less per house built; if local materials could be obtained, it should be possible to build at a very reasonable rate. The demonstration house consists of a Living Room and two Bedrooms 18' x 11', 11' x 10' and 11' x 8' respectively, with a kitchen 11' x 7'6" and a pit latrine. The single house cost roughly £183 to build.

The labourers' houses built at Pembroke Hall Sugar Factory appear to be very satisfactory and cool. The houses are built as individual units in a row. These are wooden houses made of rough local timber built on piles. They have thatched roofs.

(b) *Sewage Disposal.*

The Town of Belize. The bucket system is the method of adoption but not of choice. Each householder is responsible for emptying the buckets into the canals or the sea between 9.00 p.m. and 5.00 a.m. The system is unpleasant, expensive and unsatisfactory.

The water closet system with septic tanks and soakage pits is being installed in the better class houses; but, owing to the high water level, the soakage pits give rise to much trouble in the wet season. Also, in the dry season, there is often insufficient water for adequate flushing.

The pit latrine system is being demonstrated and should prove very satisfactory; this system has been supported by Dr. Washburn and Dr. Wells of the Rockefeller Foundation.

Unfortunately the large public water closet latrine had to be closed owing to the heavy discharge of Hydrogen Sulphide gas. This was due to the fact that the water used for flushing purposes was heavily contaminated with organic matter and not to any faulty action of the septic tank itself. To replace this latrine a series of open latrines had to be built over the canals, an unsightly, but nevertheless satisfactory, system.

Other Parts of the Colony. The bucket system, a few septic tanks and badly constructed pit latrines are used by a certain number of householders, but the use of the bush is more customary. Bored hole latrines would be eminently suitable for many of the villages and settlements not situated on rocky strata.

(c) *Removal & Disposal of Refuse.*

The scavenging in the town of Belize and other towns in the Colony is performed by the Local Authorities under the direction of their Sanitary Inspectors. Refuse might be put to better use for filling in swampy areas in certain towns, the remainder are making good use of their rubbish. Domestic refuse requires more frequent removal, but the lack of funds prevents the purchase of proper carts and trucks and the employment of extra scavengers. Considerable improvement could be made in the disposal of refuse. In the villages no system has been adopted and many villages are in a filthy state.

(d) *Water Supply.*

Belize. Rain water is stored in vats, tanks and other receptacles on the premises of the house-holders; it is the only source of drinking water. There are still numerous wells, the water being used for domestic purposes only, but these are receiving close attention under the mosquito control measures, several having been closed and the remainder kept in a good state of repair.

The Town Board has six tanks, having a total capacity of 2,372,330 Imperial Gallons, an emergency supply for the dry season.

In spite of every effort of the Town Board, many houses are without vats.

Out-Districts. Vats are used to collect drinking water in the towns and large villages, but Stann Creek and El Cayo use river water. Punta Gorda, Corozal and Orange Walk have wells, some of which are very unsatisfactory and would not stand the test of a detailed analysis. In the villages, wells, rivers, creeks and water holes are used. The water holes in particular are a very unsuitable source of drinking water. It is interesting to note that certain creeks and rivers are notorious for giving diarrhoea, and are therefore avoided by the villagers. The wells in the northern districts contain very hard water as these districts are on lime-stone strata.

It should be possible to obtain good artesian wells in various parts of the Colony similar to the well recently bored at the Sugar Factory, Pembroke Hall. The purchase of a suitable drilling apparatus for boring to a depth of 1200 feet is already under consideration.

(e) *Drainage.*

In Belize considerable strides have been made in making cement drains, especially in the Mesopotamia area. Unfortunately, the gradients being so small, the least obstruction holds up the water and the scavengers are kept busy cleaning the drains.

With the exception of Stann Creek, it should be possible to construct adequate drains in all Towns, but whatever work has been done in this way has been neglected and funds are too limited either to make extensions or carry out proper repairs. Stann Creek has its own problem inasmuch as the river overflows into the town during the flood season; also water pours in from a big swamp at the back of the town; although it would entail much labour, dykes and ditches should improve the existing conditions.

(f) *Filling in of Lots.*

Belize. On an average, 9,000 tons of mud and coral deposit are dumped every week onto low-lying lots. Under the Colonial Development Fund Scheme, Mesopotamia is being raised and made suitable for building sites. In other parts of the town, building lots are being raised and the surface water now drains into the concrete conduits. No building is permitted until the building lot is filled in to the satisfaction of the Local Authority.

Districts. Little work is being done to fill in low-lying lots except in Stann Creek.

(g) *Clearing of Bush.*

The bush behind the town is no longer being cut down unless there is available rubbish to fill in, on the assumption that we are dealing with *Anopheles Albimanus*.

The question of drainage, filling of lots and clearing of bush will be, to a great extent, solved when the work of the proposed suction dredger for reclamation of the bush around Belize and making proper dykes and embankments in certain district towns has been completed. Such a plan will alter the whole living conditions in the towns and should eventually lead to a much healthier community. Although the initial outlay and working will be expensive, such reclamation schemes are sound economic measures for improving the well-being of the people.

MEASURES TAKEN TO SPREAD THE KNOWLEDGE OF HYGIENE AND SANITATION.

Infant Welfare Work.

A second Belize clinic was opened in the Mesopotamia area in order to alleviate the over crowding at the Hudson Street Clinic and to draw children from an area untouched by the original clinic.

The average attendance at each clinic is 131.35 and 103.80 respectively. The Hudson Street Clinic has 1,715 children and the Mesopotamia clinic 441 children on their respective rolls.

In connection with these clinics, the Government District Nurse made 1,314 health visits.

A special clinic for sick children is held each week at the Belize Hospital.

Each district has its own clinic under the supervision of the Medical Officer.

Orange Walk has 168 children enrolled; average weekly attendance 20
 Corozal has 245 children enrolled; average weekly attendance 27.6
 El Cayo has 197 children enrolled; average weekly attendance 29.1
 Punta Gorda has 197 children enrolled; average weekly attendance 26.89
 Stann Creek information as to enrollment is not available for this year, but the average weekly attendance is 17.9.

These clinics are financed by a Government Grant and private subscriptions. Apart from the Medical Officers, the Matron and certain Staff Nurses, the organization is maintained by voluntary workers. A detailed report is issued annually by the Infant Welfare League.

School Medical Work.

The new card index system now adopted by all Medical Officers throughout the Colony has proved a great success, simplifying the work and giving more accurate figures for statistical purposes.

Details of the work in each district are mentioned under the respective district reports.

Below is set forth a summary of the diseases found in the 2,297 children examined in Belize:—

TABLE III.

SCHOOL EXAMINATION OF 2,297 CHILDREN IN BELIZE.

Males 1,240 Females 1,057 Total 2,297.

Defect	Number of children with Defect.	Percentage of children with Defect.
Non-Vaccination	742	32.32
Bad Nutrition	186	8.09
Poor Nutrition	244	10.62
Eye Diseases	58	2.52
Defective Vision	128	5.57
Bad Teeth	729	31.73
Anaemia	413	17.97
Splenic Enlargement	147	6.39
Clinical Malaria	15	.65
Worm Infestation	212	9.22
Parasitic Infection	32	1.34
Pediculi Capitis	32	1.34
Tonsils and Adenoids	337	14.67
Neck Glands	114	4.96
Heart Disease	54	2.36
Ear Disease	5	.21
Defective Hearing	2	.08
Lung Disease	14	.60
Umbilical Hernia	17	.74
Hernia	1	.04
Rickets	2	.08
Deformity	17	.74

In other words, including vaccinations, 3,459 conditions require attention; excluding vaccinations, 2,727 conditions need attention amongst the 2,297 children.

Of the 413 cases of Anaemia, 50 children had the Haemoglobin content of the blood estimated, the readings varying from 45-65 per cent. Of the 337 cases of Tonsils and Adenoids only comparatively few need surgical interference.

Several hundred dollars have been spent on dental treatment for the children, but a considerable amount of work remains to be done.

The work of medical supervision of the schools is but in its infancy and much work remains to be done. Unfortunately, owing to lack of the necessary trained personnel, the advances are bound to be small.

IV. Port Health Work and Administration.

During this year quarantine regulations were in force against Central American Republics. It has been the custom to place all passengers under medical surveillance for 14 days, quite regardless of their last port of call. However, this practice has been relaxed, inasmuch as it is quite impossible to place an adequate quarantine barrier in a country surrounded by ungarded frontiers. It is not the passengers who arrive by the usual port of entry, but the people who cross the frontiers at uncontrolled places, who are the source of danger.

The advent of air services connecting this Colony with Mexico and Spanish Honduras is likely to increase the quarantine problems in the near future, especially with regard to Yellow Fever.

All vessels arriving in the port of Belize are boarded by a Medical Officer.

During the year, no quarantinable disease occurred in the port.

V. Hospitals and Dispensaries.

There are six hospitals in the Colony—one for each District. The hospital in the capital town, Belize, contains sixty-two beds and twelve cots. The number of beds in the other hospitals range from twenty to six. In these hospitals treatment is afforded for medical, surgical and obstetrical cases. The poor and indigent receive free treatment in all the hospitals. For other classes, the fees range from 25 cents to \$3.00 a day for each person. Cases of tuberculosis are ordinarily not received for treatment in the hospitals. Accommodation for twelve destitute sufferers from this disease is provided at the Belize Poor House.

Each district and each hospital in the Colony is in the charge of a Medical Officer under the Senior Medical Officer, who is *ex-officio* Medical Officer of Health for the entire Colony. In the Belize Hospital there is an English-trained Matron and one Nursing Sister, controlling a subordinate local nursing staff. Each district hospital has a Belize-trained nurse and Ward-maids, who are supposed to assist in nursing in addition to their domestic duties. There is a course of training at the Belize Hospital extending over a period of three years for locally recruited nurses.

The probationary staff nurses are insufficient to meet the needs of the Hospital.

Trained nurses are gradually replacing the untrained ward maids in the district hospitals.

Stann Creek has a 4-bed Maternity Ward.

Cayo Hospital has had extensive repairs and alterations made during the year under review.

1,852 cases were admitted to Belize Hospital. In the Out-Patient Department 30,035 cases were seen and treated. Of these 30,035 cases, 7,534 were new cases. At the special clinics, 312 attended the Eye Clinic and 1,306 the Dental clinic. At the Venereal Disease Clinics 4,507 persons were treated or attended for dressings and investigations. 935 persons reported for Medical Certificates.

A detailed classification of the various diseases treated in Belize Hospital and in the District Hospitals will be found at the end of the report.

There were 118 major and 247 minor operations—a total of 365. A detailed list of operations will be found on page 15:

Owing to a complete breakdown of the X-ray apparatus, practically no X-ray work was undertaken during the year.

The Dental Clinic meets twice a week for treating indigent persons and children from the Infant Welfare Clinics and schools.

The Eye work lapsed temporarily, but was revived by one of the Medical Officers, who spent 6 months doing post graduate work at Moorfields, London.

The present hospital is totally inadequate for the demands made, owing to the dilapidated condition of the building and its limited accommodation; however, it is fully equipped for almost every type of medical work.

The Secretary of State has approved of the building of a new hospital in reinforced concrete.

TREATMENT OF VENEREAL DISEASES AT THE BELIZE HOSPITAL.

Syphilis. During the last six months of 1938 the attendance for anti-syphilitic treatment has increased appreciably as shown, the figures are submitted below:—

July	84
August.....	141
September	117
October	215
November	298
December	169

The fall in the attendance in December is attributable to the increased number of men taken on by the Public Works Department for work out of town during that month and also to the fact that two of the clinics fell within the holiday season.

We are convinced that the importance of continuous attendance at clinics for a prolonged period is being increasingly realised by the class of the community which now attends the Out-Patient Department. Irregular attendance is more often due to the nature of their employment which usually takes them out of Belize rather than to ignorance or remissness on the part of the patients.

Analysis of Cases.

Congenital Syphilis	3
Primary Syphilis	4
Secondary Syphilis	16
Tertiary—clinically diagnosed	28
Neurosyphilis	28
Serological diagnosis	140
Total	219

We should like to emphasise the high proportion of neurosyphilis among out patients (12%)—the commonest manifestation of which is primary optic atrophy.

The treatment is being carried out with full dosages of Nevarsphenamine, Sulpharsphenamine, Bismuth and Tryparsamide as recommended by the large English and American clinics.

Gonorrhoea. At present regular treatment is available for males only. There are 32 patients attending the clinic for treatment. Owing to the necessity for daily attendance the defaulting rate is higher than it is in the treatment of Syphilis.

The standard treatment we are employing consists of the oral administration of Sulfanilamide combined with daily irrigations. We hope to try out M & B 693 in the course of the next few months.

As the treatment of female gonorrhoea necessitates special accommodation, extra staff and equipment, we have been unable to begin the systematic treatment of the disease in women. It is fully appreciated that any effective anti-venereal programme must include provision for tackling this aspect of the problem.

Lymphogranulome Inguinale and Chancroid. As the incidence of these diseases is much less, and the treatment simple and of short duration, they are treated in the Out-Patient Department and Wards; no special clinics are considered.

Local Propaganda.

We are considering carefully the best methods to be employed in this direction. In a small community too vigorous propaganda might attach a definite stigma to attendance at the clinics. Moreover, the attendance has been growing more rapidly than our facilities and supply of drugs can allow us to cope with.

LABORATORY WORK, BELIZE.

It is hoped in the future to develop the bacteriological side of the work.

Through the courtesy of the Rockefeller Foundation, Mr. H. L. Bennett, Laboratory Technician, was given a travel grant of two months in order to visit the Laboratory at Managua, Nicaragua.

The following list shows the work done during the year under review:—

- 1,227 Kahn tests—542 Positive, 685 Negative.
- 1,520 Urine Specimens, 16 contained Trichomonas—2 Male, 14 Female.
- 88 Specimens of Faeces for Ova—53 Positive, 35 Negative.
- 29 Specimens of Faeces for Amoeba or Cysts—10 Positive.
Amoebae Histolytica 1.
19 Negative.
- 119 Blood film for Malarial Parasites—29 Positive, 90 Negative.
- 36 Blood counts with differential counts.
- 60 Patients for Haemoglobin percentages.
4 Sedimentation rates.
- 42 Specimens of Sputum for Koch's Bacillus—15 Positive, 27 Negative.
- 5 Smears for Klebs-Loffler Bacillus—1 Positive.
- 2 Smears for Vincent's Angina—2 Positive.
- 6 Smears for Gonococci—4 Positive, 2 Negative.
- 2 Smears for Leishman Donovan Bodies—1 Positive.

DENTAL DEPARTMENT.

This Department is run by an Honorary Dentist residing in Belize, as a part time job. There are two clinics per week. On an average 350 cases are treated per month, with an average attendance of 40—50 per clinic. During the year under review, 4,200 persons were treated.

The Honorary Dentist also visits the Prison, Asylum and Poor House and 75, 35 and 25 persons respectively, were seen in these institutions. 250 treatments for the Maternity Ward were given and 125 were sent from the Infant Welfare Clinics for examination and treatment. The total number of extractions made during the year amounted to 8,760.

A small amount of work has been done amongst the school children at the average cost of \$6.00 per head, but owing to lack of funds the scope is very limited.

TABLE IV.

Operations Performed in Belize Hospital during 1938.

Type of case	Number Performed	Operations	Results
ABDOMINAL:			
Inguinal Herniae	33	Herniotomy	1 Died
Femoral Herniae	3	Radical Cure	
Umbilical Herniae	2	Mayo's Herniotomy	
Strangulated Hernia	1	Radical Cure	
Direct Hernia	1	Radical Cure	
Direct Hernia	1	Plastic	
Appendicitis	19	Appendicectomy	
Duodenal Ulcers	2	Gastro-jejunosomy	1 Died
Cancer of the Stomach	1	Anterior Gastro-enterostomy	1 Died
Ruptured Spleen	1	Splenectomy	
Puncture Wound of Stomach	1	Laparotomy	
Double Inguinal Hernia and Appendicitis	1	Radical Cure & Appendicectomy	
GYNAECOLOGICAL:			
T. B. Mastitis	2	Amputation of Breast	
Breast Abscess	4	Incision	
Fibromyoma of Breast	2	Excision	
Fibromyoma of Uterus	10	Hysterectomy	3 Died
Fibromyoma of Uterus	2	Myomectomy	
Ectopic Gestation	3	Laparotomy	
Granuloma of Vagina	1	Removal	
Cystococle	1	Radical Cure	
Menorrhagia	6	Curettage	

Type of case	Number Performed	Operations	Result
Abortions	3	Curettage	
Cystocoele & Rectocoele	3	Colpo-Perineorrhopyx	
Retroversion of Uterus	3	Pessary inserted	
Bartholins' Cysts	2	Excision	
Ovarian Cysts	2	Oophorectomy	
Carcinoma of Ovaries	1	Laparotomy & Enterostomy	1 Died
GENITO-URINARY:			
Gumma of Testis	1	Orchidectomy	
Hydrocele	2	Orchidectomy	
Urethral Stricture	9	Dilatation	
Phimosis	19	Circumcision	
Urinary Fistula	3	External Urethrotomy	
Paraphimosis	2	Circumcision	
Prostatic Abscess	1	Incision	
Perineal Abscess	6	Incision	
Perineal Fistula	6	External Urethroscopy	
Extravasation of Urine	2	Multiple Incisions	
Cancer of the Penis	1	Partial Amputation	
Retention of Urine	1	Suprapubic Cystotomy	
Cystitis	3	Cystoscopy	
Haematuria	1	Cystoscopy	
Haematoma of Scrotum	1	Evacuation	
Encysted Hydrocoele of Cord	1	Invagination	
Varicoele	1	Radical Cure	
RECTAL:			
Carcinoma of Sigmoid	2	Colostomy	
Stricture of Rectum	8	Dilatation	
Lymphogranuloma Inguinale	1	Rectal Examination	
Amoebic Dysentery	1	Sigmoidoscopy	
Multiple Polypi of Sigmoid	1	Sigmoidoscopy	
Anal Fistula	9	Scraping and Packing	
Recto-Vaginal Fistula	9	Perrinorrhaphy	
ORTHOPAEDIC:			
Fractures	27	Reduction and Plaster	
T. B. Spinal Caries	1	Plaster	
Osteomyelitis	3	Sequestrotomy	
Cut Tendon	8	Suturing	
Gas Gangrene	1	Amputation of Leg	1 Died
Gas Gangrene	1	Incision	
Septic Toe	3	Amputation of toe	
Injury to Finger	4	Amputation of finger	
Septic Arthritis	4	Bohler's Extension	
Synovitis	1	Aspiration of Joint	
Ingrowing Toe Nails	4	Removed and Suturing	
Granulomatous Ulcer	1	Lisfranc's Amputation	
Popliteal Abscess	2	Incision and Drainage	
Un-united Fracture	2	Sequestrotomy	
Talipes, Equino-Valgus	1	Arthropodesis	
Workman's Neurosis of Shoulder	1	Movement	
EAR, NOSE AND THROAT:			
Diphtheric Larinigitis	1	Tracheotomy	
Enlarged Glands (Throat)	5	Removal	
Acute Mastoiditis	3	Mastoidectomy	
Acute Mastoiditis with Cerebral Abscess	1	Mastoidectomy & Trephine	1 Died
Hypertrophic Tonsils & Adenoids	9	Tonsillectomy	1 Died
Adenoma of Thyroid	3	Thyroidectomy (partial)	

Type of case	Number Performed	Operations	Result
Thyro-Glossal Cyst	2	Incision	
Salivary Mucocoele	1	Incision	
MISCELLANEOUS:			
Callous Ulcers	4	Sympathectomy	
Whitlows	9	Incision	
Gun Shot Wound to Neck	1	Surgical Toilet	
Lacerated Wounds	8	Surgical Toilet	
Impacted Wisdom Tooth	1	Extraction	
Foreign Bodies	4	Removal	
Meningioma of Brain	1	Excision of Sac	
Gluteal Abscess	1	Incision	
Naevus	1	Cauterization	
Buboes	2	Incision and Scraping	
Lipomas	2	Removal	
Septic Condition	8	Scraping	
Haemorrhagic Cysts	1	Cauterization	
Septic Conditions	19	Incision	
Keloid of Ear	1	Skin graft	
Chronic Ulcers etc.	4	Skin graft	
Examination under Anaesthesias	6	P. V. and Rectals	
Carbuncle	1	Excision	
Melanoma of Foot	1	Excision	
Carcinoma Mammae	1	Biopsy	
Meibomeian Cyst	2	Opening and scraping	
Frontal Empyemata	3	Opening and scraping	
Neurofibromata	1	Excision of nodule	
	365		10 Died

V. Branch Dispensaries.

Only two branch dispensaries exist in the Colony; one at Benque Viejo in the Cayo District, the other at Maskalls on the Belize-Orange Walk Road.

Benque Viejo. This dispensary is visited each week by the District Medical Officer of Cayo who travels out by car on the road leading to the Guatemalan frontier. The dispensary is also open daily for the treatment of minor ailments under the supervision of a Roman Catholic Sister whose services cost the Government \$240.00 per annum. No figures are available of the work done there, but it must be appreciated as recently there was a demand for the establishment of a small hospital. This, however, was considered unnecessary owing to the close proximity of El Cayo, easily accessible by motor car.

Maskalls: There is no actual dispensary building here as at Benque Viejo; a clinic is held by a mobile unit which travels up the Orange Walk Road visiting agricultural settlements and Public Works Department camps between Belize and the village of Maskalls.

It should be mentioned that this work is in the nature of an experiment, it was only started in June this year, in the hopes that similar schemes might be adopted in other areas as money and personnel become available. Much of the ill-health is a consequence of the appalling lack of sanitation in these villages and communities, as in the rest of the colony, and it is hoped that the awakening of interest in sanitary matters and the introduction of bored-hole latrines and artesian wells will go a long way towards improving conditions.

The ribbon development along the Belize-Orange Walk Road presents the first of many new problems which the Medical Department will have to face on the opening up of the Colony by new roads.

Maskalls is 40 miles from Belize; on the first 20 miles of road there are not more than four families, but on the last 20 miles it is estimated that there are 2,500 people working as agriculturalists. For the most part these agriculturalists are men from Belize who have gone out to settle on the land, but amongst them are quite a number of the Jamaicans who have emigrated and continue to emigrate into this colony.

Certain settlers kindly placed their houses at the disposal of the Medical Department and the sick congregate in these houses to await the doctor on the first three Thursdays of every month.

Indigent persons and children are treated free of charge and a small fee, usually 25 cents, but ranging up to \$1.00, is charged to those considered able to pay. The old-established settlers with paying crops raise no difficulty about paying this nominal fee but the more recent settlers are not always willing to pay for the services of a doctor. The medical officer has been instructed to use his own discretion about enforcing payment, depending on the nature of the case and the circumstances of the patient.

Five halts are usually made at specified places, besides stops at the Public Works camps, and an average of 84 patients a day is seen. A distance of ninety miles, including a detour of 5 miles for the village, is covered each trip; it makes a full and tiring day for the staff on duty.

It should be particularly noticed that the children at Maskall's school, who are now taking daily prophylactic quinine, besides being treated for their other ailments, show an astounding improvement in general well-being and there has been a steady increase in the daily average of school attendance since treatment was started; a most encouraging result.

However, the clinical treatment is but part of the work. Talks and discussions are carried on with the settlers about their water supplies and other sanitary matters and a general interest in the subject is being fostered. During the coming year it is hoped to carry out some far-reaching sanitary measures, especially with regard to water supplies and latrines. If the necessary expenditure is approved, the road will form an experimental field for artesian wells and bored-hole latrines.

It is estimated that the service will cost \$1,000.00 per annum, including \$432 for hire of a car. This figure does not include the salary of either the Medical Officer or the Student Dispenser. This figure will increase as more agricultural lands are taken up and more secondary roads are opened; but as the number of persons to be visited will also increase, the expenditure per head will probably remain the same.

VI. Prisons and Lunatic Asylum.

The Prison is a well-managed institution; the grounds and individual cells and out-buildings have been maintained in excellent condition.

The diet is plentiful and well cooked.

The average daily number of prisoners during the year was 51 as compared with 49 in 1937.

THE LUNATIC ASYLUM:

Patients remaining at the end of 1937:—

Males	34
Females	26
	—
	60

Patients admitted during 1938:—

Males	15
Females	7
	—
	22

Patients discharged during 1938:—

Males	15
Females	3
	—
	18

Deaths during 1938:—

Males	5
Females	4
	—
	9

Patients remaining at the end of 1938:—

Males	29
Females	26
	—
	55

Attempts at occupational therapy had some small success. The number of patients is so small that classes for instruction cannot be arranged amongst those who can respond to this activity; gardening and the preparation of coconut fibre have met with some small response.

VII. Poor House and Tuberculosis Huts.

This group of buildings adjoins the Asylum and is under the direction of the First Medical Officer through the authority of the Senior Medical Officer. The following table gives the details of admission and cost per annum of the Poor House and Tuberculosis Huts.

POOR HOUSE.

	Males.	Females.	Total.
<i>Number of Beds.</i>			
	30	15	45
<i>Number of Admissions.</i>			
1935	39	6	45
1936	28	10	38
1937	26	12	38
1938	18	16	34
<i>Number of Discharges and Deaths.</i>			
1935	37	11	48
1936	20	8	28
1937	19	15	34
1938	23	15	38
<i>Cost of Maintenance per Annum. (Dietary and Personnel).</i>			
1935			\$3,633
1936			4,080
1937			4,319
1938			4,269

This does not include the cost of bedding and clothing.

Cost per Head per Diem in Cents.

1935	19c
1936	19c
1937	18c
1938	19c

TUBERCULOSIS HUTS.

	Males.	Females.	Total.
<i>Number of Beds.</i>			
	6	6	12
<i>Number of Admissions.</i>			
1935	10	5	15
1936	8	9	17
1937	7	5	12
1938	7	6	13
<i>Number of Discharges and Deaths.</i>			
1935	10	5	15
1936	8	7	15
1937	6	5	11
1938	5	5	10

Cost of Maintenance per Annum.

This is included above in the Maintenance figures for the Poor House.

Cost per Head per Diem in Cents.

1935	19c
1936	19c
1937	19c
1938	19c

The term "Poor House" is a misnomer as the majority of the inmates are either infirm old persons or incurable cripples, with a few destitute persons. A qualified nurse is in residence to carry out the various treatments required by the old and the infirm.

Attached to the Poor House is a series of hutments containing single beds for the use of incurable cases of Tuberculosis. There are never more than three cases in isolation in the 12 huts available. The system leaves a lot to be desired and it is hoped that Dr. Wells' recommendations will be adopted. A copy of Dr. Wells' report will be found amongst the appendices.

R. L. CHEVERTON,
Senior Medical Officer.

10th June, 1939.

SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR 1938 TAKEN AT BELIZE, BRITISH HONDURAS.

MONTH	BAROMETRIC PRESSURE (Fahrenheit Degrees) Reduced					AIR TEMPERATURE						RELATIVE HUMIDITY			
	Monthly Mean	Highest	Date	Lowest	Date	Monthly Mean	Means of Max.	Min.	Absolute Maximum	Date	Min.	Date	Max.	Min.	Mean
January	30.035	30.398	26th	29.880	21st	73.0	79.0	67.0	82.0	3, 6, 12 21&24	50.0	27th	100	84	94
February	30.059	30.170	2nd	29.950	19th	73.8	79.5	68.1	82.5	21st	61.0	4th	100	81	93
March	29.958	30.120	9th	29.840	5th	78.3	83.3	73.3	86.0	31st	68.0	12th	98	83	87
April	29.956	30.110	11th	29.770	7th	78.2	83.9	72.5	86.0	1, 2, 25, 29	62.0	10, 11	98	85	92
May	29.908	30.020	1st	29.770	6 & 7	80.3	86.4	74.3	89.0	13, 14, 15	67.0	29th	100	85	92
June	29.932	30.010	24, 28, 29	29.830	14th	80.1	86.1	74.1	88.0	4, 9, 10	67.0	1st	100	87	93
July	29.941	30.010	15th	29.830	26th	80.7	87.4	74.0	89.0	22nd	68.0	11th	98	81	92
August	29.910	30.030	4 & 5	29.730	25th	80.2	87.5	72.9	89.0	16—20 24th	66.0	9, 21	100	85	93
September	29.879	30.098	25th	29.770	10th	79.2	87.0	71.5	89.0	1, 9 & 14—20	67.0	22&23	100	89	93
October	29.907	30.000	6, 30, 31	29.760	23rd	76.3	84.7	68.0	90.0	13th	61.0	30th	100	87	94
November	29.963	30.160	30th	29.780	7th	74.7	82.8	66.6	87.0	7th	58.0	30th	100	84	93
December	30.032	30.190	10th	29.880	26th	71.9	80.6	63.2	85.0	29, 30, 31	54.0	15, 16	100	89	95
Average Mean for 12 months	29.956	30.109	—	29.815	—	77.2	84.0	70.4	86.8	—	62.4	—	99%	85%	92%

SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR 1938 TAKEN AT BELIZE, BRITISH HONDURAS.

MONTH	RAINFALL		WEATHER			WIND								REMARKS			
	Total	Max. In 24 Hours	Date	Number of days of			Number of times wind observed from										
				Rain	Clear Sky	Over-cast	N.	N.E.	E.	S.E.	S.	S.W.	W.		N.W.	Calm	
January ..	8.89	1.73	13th	19	1	2	1	—	7	8	—	—	—	—	—	15	—
February ..	4.38	.97	11th	19	1	4	3	—	6	8	—	—	—	—	—	9	—
March ..	0.32	.20	26th	3	7	—	—	—	8	22	—	—	—	—	—	1	—
April ..	1.49	.43	27 & 30	11	5	2	—	—	10	14	—	—	—	—	—	3	—
May ..	5.48	2.98	28th	9	—	4	1	—	3	25	—	—	—	—	—	1	—
June ..	9.85	3.69	2nd	16	1	2	—	—	24	28	—	—	—	—	—	1	—
July ..	3.98	1.20	13th	20	—	6	—	—	23	31	—	—	—	—	—	1	—
August ..	10.77	1.76	9th	24	1	4	1	—	24	13	—	—	—	—	—	8	—
September ..	12.13	1.65	7th	26	1	7	1	—	27	5	—	—	—	—	—	6	—
October ..	12.08	1.90	1st	25	4	6	3	—	2	2	—	—	—	—	—	21	—
November ..	8.52	2.80	14th	23	7	8	9	—	6	3	—	—	—	—	—	21	2
December ..	3.31	1.76	28th	12	6	3	—	—	5	—	—	—	—	—	—	19	1

Observations are taken at 6 a.m. only from January to May and the month of December; and at 6 a.m. and 6 p.m. from June to November.

Meridian of Longitude adopted for calculation of time as standard in the Colony 90° W.

Hours slow of Greenwich Mean Time: —6 hours.

Longitude of the Station:—88° 11' W.

Latitude of the Station:—17° 31' N.

Barometer cistern 17 ft. above Mean Sea Level.

Anemometer above ground 3 feet.

Thermometers above ground 5.6 feet.

APPENDIX I.

Report of Dr. C. W. Wells' Visit to British Honduras from January 21st, to February 28th, 1938.

At the request of the Government of British Honduras and with the approval of the officers of the International Health Division of the Rockefeller Foundation, I left Jamaica, January 21st by the S.S. "Connector" for Belize, British Honduras.

Without delay tuberculin testings were started the morning of the day following arrival and proceeded without interruption during the entire period of four weeks and three days of sojourn in the Colony. The accompanying table shows the results of intracutaneous tuberculin tests completed during the period of investigation. These tests were conducted on 2,967 school children in the city of Belize out of a total school population of approximately 3,700. 588 tests on school children in the district of El Cayo; 557 tests on school children at Stann Creek; and 172 tests on adults, mostly males, in Belize and Stann Creek—representing a total of 4,284 tuberculin tests.

Little interest is attached to the results of the tests for adults. In this group approximately 97% were tuberculin positive. The results of the school children are sub-divided according to individual schools, and considerable variation was found in the proportion tuberculin positive, ranging from 51.7% for a small group of 57 pure stock Maya Indians in the village of Succotz to 89% in the Salvation Army School in Belize. In Belize itself the proportion tuberculin positive ranged from 68.9% to 89% in different schools. On the whole, the infection rate, as indicated by a positive tuberculin test, was comparatively high, although lower than that encountered in recent studies in Jamaica; furthermore, the proportion of two, three and four plus reactors to 0.01 mg. tuberculin was fairly high in Belize, Stann Creek and one school in El Cayo. In this regard the Indian school at Succotz was the lowest. It should be added that final comparison of the results between different schools and localities cannot be made at this time in view of the desirability of correcting the results for age distribution; this will be done later. At the moment we are concerned with the results in so far as they indicate a fairly high infection rate, not only in the capital city, Belize, and in the coastal town, Stann Creek, but also in a somewhat remote town and district (El Cayo) 136 miles distant in the interior from Belize which is only reached after difficult travel by river boat, oftentimes requiring from two to five days, depending upon the stage of water level.

The official medical report for the Colony in 1936 discloses that there were 30 deaths from pulmonary tuberculosis in the town of Belize, the population of which is approximately 16,000. This rate indicates an annual mortality rate of between 180 and 200 per hundred thousand. In a town as small as Belize, this may be considered a fairly high rate and suggests the greater prevalence of tuberculosis than has been realised by local authorities.

It is difficult to estimate the probable number of active and open cases of pulmonary tuberculosis in the town; on the basis of 30 annual deaths there probably are between 120 and 150 cases of the disease in Belize. However, at the time of my visit there were only 28 known cases in the town; this latter figure is of little significance, since no effort has been made to discover cases, no publicity with reference to the disease has been conducted and practically no facilities are available for the care and treatment of those suffering from the affliction. A little over one year ago 12 isolated separate rooms were constructed at the Poor House for indigent cases. At the time of my visit only 3 of the rooms were occupied; 1 case was non-tuberculous. Also, during my visit 1 active case was discovered in the Public Hospital after one week's residence. The conclusion from these studies and observations as well as the available medical data indicates a higher prevalence of tuberculosis than the local authorities have realised.

Before leaving the Colony a conference was held with Sir Alan Burns, Governor of British Honduras, Dr. Cheverton and myself at which the entire subject and problem was discussed and suggestions made as to steps which local authorities might undertake leading to the control and prevention of tuberculosis. The suggestions made at this conference were as follows:—

1. EDUCATION: Without the support of the general public a successful programme for the control of tuberculosis would be difficult, if not impossible. An organized campaign to spread knowledge with regard to tuberculosis, and information as to the steps necessary for its control and prevention should be undertaken. This does not necessitate the outlay of large sums of money. Medical Officers connected with the Medi-

cal Department might arrange to give talks at schools, churches and public occasions and before other organizations, such as, clubs, Boy Scouts, etc., covering not only the subject of tuberculosis but other health problems. Other individuals in the community might be enlisted in this campaign, particularly private physicians, individuals with considerable influence in the community, ministers, leaders in the various churches, politicians and prominent business men. In addition to these efforts the support of the Press should be obtained.

2. **PROVISION FOR THE CARE OF TUBERCULOUS PATIENTS:** It is suggested that a small ward accommodating from 8 to 12 patients be built, connected with the Public Hospital in Belize; this ward to be used for early cases, especially those suitable for collapse therapy, and with the expectation that patients would not be kept in the ward for a long period of time; those receiving collapse therapy to be further treated in their homes as ambulatory cases. All patients, not only those in the wards but those receiving home treatment, should receive the best medical and nursing care that can be provided. Far advanced cases not suitable for collapse therapy should remain in their homes under close and constant supervision by a trained nurse who would be responsible for the teaching of prevention both to the patients and other members of the household. Tuberculous cases treated at home should be surrounded with all possible barriers to prevent the spread of infection and disease to others. Efforts should be made to separate such patients from other members of the household by setting aside a special room. To accomplish this it might be necessary, in some instances, to provide funds for the construction of a separate room for the patient's use. Indigent patients suffering from tuberculosis should be provided with accommodation at the Poor House. (12 individual single-room cottages are now available for this).

3. **THE ORGANIZATION OF A TUBERCULOSIS OR CHEST CLINIC, DISPENSARY OR OUT PATIENT DEPARTMENT AT THE PUBLIC HOSPITAL IN BELIZE FOR THE EXAMINATION OF CASES, SUSPECTS AND CONTACTS:** Here should be kept complete records of out-patient cases and contacts. There will be no serious objection to utilizing the regular Out-Patient Department at the Hospital for this purpose, setting aside certain hours during the week for chest cases. The Clinic or Dispensary would be responsible for a systematic programme for the follow-up investigation and examination of all contacts to known cases and all suspects. Under the Dispensary programme it is strongly recommended that routine tuberculin tests should be made of all infants and pre-school children attending the infant clinics and child welfare stations. The investigation of the positive reactors to be the responsibility of the visiting nursing staff. (It is estimated that 180 infants are examined in the infant clinic each week).

4. **CASE-FINDING PROCEDURES:** While the Dispensary's activities, if conducted properly, will succeed in discovering many new cases of the disease, on the other hand it is realised that additional efforts should be undertaken and it is suggested that an effort be made to thoroughly investigate the contacts of infants and school children who have received tuberculin tests, which test has been marked by a severe reaction (two, three or four plus) to the 0.01 mg. tuberculin. In addition, it would not be an insurmountable task, if sufficient visiting nurses are available, to undertake a house-to-house survey of Belize for the purpose of discovering suspects.

5. **PUBLIC HEALTH OR VISITING NURSES:** It is recommended that at least two full-time visiting nurses be employed for Belize. This town is divided equally by a river. A nurse could be assigned to each half of the town. Her duties would be the investigation of known tuberculosis cases, instruction of contacts of cases, search for new cases, as well as participation in other public health problems on instruction from the medical staff.

GENERAL REMARKS:

No reference is made in this report to recommendations for the control of tuberculosis outside of Belize. This is purposely omitted, first, because the economic resources of the Colony at this time are not adequate to support a large or extensive programme. The Senior Medical Officer realises something of the seriousness and extent of the problem and as opportunity and funds are available is qualified to expand and extend the activities with reference to tuberculosis. Furthermore since no machinery is now in operation concerned with tuberculosis, it is felt wise to concentrate the limited means available on developing a creditable service in Belize. Such development would offer an opportunity to try out methods and to train personnel who might later be assigned to duty in other parts of the Colony.

The programme suggested would not entail a large cost by Government; it would involve the construction of a small ward at the Public Hospital in Belize, the salaries of two visiting nurses and the purchase of a few simple and relatively inexpensive apparatus, such as for pneumothorax and later on possibly portable X-ray.

In conclusion, remark should be made of the cordial reception and cooperation received from representatives of the Government during my stay in British Honduras. Sir Alan Burns, the Governor, was much interested and frequently discussed with me the tuberculosis problem. The Government Medical Staff in Belize were all warm supporters and extended every facility for the successful conduct of the studies. Any programme concerned with Tuberculosis which may be developed by Government in Belize will not have the handicap of inefficient medical personnel, for the three medical officers on duty in the capital city are all capable, efficient and on their toes. This augurs well for the success of any programme which may be undertaken.

My attention has been called for the lack of regulation safeguarding the Colony from the entrance of individuals who may be suffering from tuberculosis. In view of the considerable number of Jamaicans who are entering British Honduras as Colonists and the high prevalence of tuberculosis in Jamaica, it might be suggested that some measures be instituted to prevent the admission of individuals suffering from tuberculosis.

TABLE VII.
RESULTS OF TUBERCULIN TESTS IN BRITISH HONDURAS, JANUARY 25th, — FEBRUARY 23rd, 1938

SCHOOLS	Number Tested	0.01 mg.		0.01 mg. + + + + +	2, 3, and 4 plus to 0.01 per 100 tested	1.0 mg.		Number absent for 1.0 mg. readings	Corrected per cent. tuberculin positive
		Positive	Negative			Positive	Negative		
Belize—St. Mary ..	431	207	248	71	18.3	139	85	25	79.2
Salvation Army ..	91	27	73	12	13.2	45	10	9	89.0
Ebenezer ..	277	110	180	48	17.3	109	58	13	78.3
Holy Redeemer ..	684	280	422	118	17.3	221	183	22	72.6
St. Ignatius ..	241	91	155	46	19.1	77	73	10	68.9
St. John ..	335	163	218	97	28.9	133	39	46	87.1
Wesley ..	537	239	332	85	15.8	201	97	34	81.1
Government School ..	89	42	61	22	24.7	33	14	24	81.4
Stann Creek ..	557	271	350	143	25.7	170	116	60	77.1
El Cayo—Cayo ..	241	42	206	31	12.9	112	87	7	63.7
St. Elena ..	74	19	60	14	18.9	39	16	5	78.5
Benque Viejo ..	220	34	191	18	8.2	116	70	5	65.9
Succotz ..	53	4	52	4	7.5	24	25	3	51.7
Stann Creek Labourers (Adults)	95	83	12	72	75.7	9	3	0	96.8
Adults (Belize) ..	77	61	16	38	49.3	14	2	0	97.4
Private Schools (Belize) ..	282	151	133	57	20.2	93	38	2	86.6
Total Tested ..	4,284	1,824	2,709	876	20.4	1,544	916	265	77.7

APPENDIX II.

Corozal District, Medical and Sanitary Report.

Dr. T. PATTERSON, *Medical Officer.*

The district of Corozal has an area of 718 square miles and an estimated population of 8,199. The population is 11.41 per square mile.

I. ADMINISTRATION.

The staff consists of:

Medical Officer
Nurse-in-charge
District Probationer
Wardmaid, Cook and Hospital Messenger.

Dr. H. S. Rassim took over from Dr. D. W. Degazon on 15th March and handed over to Dr. T. Patterson on 12th April. The Medical Officer was also in charge of Orange Walk till June.

II. PUBLIC HEALTH.

The year was very dry in Corozal (rainfall 55 inches), and mosquitoes were never numerous. Approximately 520 cases of malaria, mostly clinical, were treated. Of 56 blood films examined, 9 were found to contain parasites, all *P. Vivax*.

Helminthiasis: An helminthic survey of the children of eleven schools in the villages of the District was carried out. In all 459 stools were examined by sugar floatation of ova and treatment given where necessary. The percentage of hookworm infestation varied in different schools from 21% to 95%. The following figures show the average infestation of the eleven schools:—

Total number of faecal specimens examined	459.
Percentage of Hookworm	50%
Percentage of ascaris	72%
Percentage of trichuris trichiura	62%

Ova of thread worm were frequently found, two specimens contained *Balantidium Coli* and a few cases of intestinal myiasis were seen. These stool examinations will be repeated at least once a year and will include adults where possible, so that in time, it will be seen whether or not such repeated anti-helminthic treatment as will be given has any effect in lessening infestation.

Veneral Disease: Cases of gonorrhoea appear fewer than in the Cayo District and the disease responds well to sulphanilamides. Several cases of syphilis were treated. Now that bloods can be sent to Belize for a Kahn test there is no longer need to judge the correctness of diagnosis by the results of treatment.

Malnutrition: Malnutrition is unusual in Corozal town (excepting among babes) but exists in the villages; not that there is an insufficiency of food but rather because of the quality of the diet which is customary and in which the tortilla, made from partially devitaminised corn, figures prominently. However, there is so much helminthiasis and malaria in these villages that the part played by lack of vitamins in the food consumed, as a cause of malnutrition, is obscure. An example was noticed recently when the children of a certain community in the District were found to be infested with hookworm to the extent of 90%. This community had been previously reported as showing more signs of malnutrition than others and the fact that the hookworm rate among the children is the highest yet encountered, in this part of the Colony, may be more than a coincidence.

Among the ancient Mayas dental caries is described as having been the rule, judging from skulls examined. This is far from being the case at present, the inference being that the present inhabitants do not consume the entirely corn diet credited to their forefathers.

Tuberculosis: Some half dozen cases of advanced pulmonary tuberculosis were seen. Four specimens of sputa contained tubercle bacilli. Excepting the hospital there is no institution to receive these patients and most of them remain at home as a rule. If admitted to the hospital, other patients leave rapidly.

Epidemics: An epidemic of mumps occurred in the later month of the year. No complications were seen.

III. SANITATION AND HYGIENE.

(a) Administration.

The Sanitary staff consists of the Medical Officer, Sanitary Inspector and an occasional helper.

(b) Preventive Measures.

Drainage: A survey of Corozal was made in August by a Government Surveyor to see if the back of the town could be drained. The difference in level between this part of the town and the sea was too small for a practical form of drainage to be undertaken. In many parts the streets have been built up higher than the house sites and the latter become flooded by overflowing ditches in the wet weather.

Water Supply: A scheme for supplementing the water supply, which consists of rain water vats and shallow wells, by a pipeline from what is probably an artesian source at the edge of the town was held up for want of a bacteriological analysis. The screening of vats is not very efficient but they are kept well supplied with fish and are inspected monthly. Lots are kept fairly free from bush and weeds but the town, throughout its whole length, is edged by a swampy coconut plantation. As there is no possibility of draining or filling in this area, it seems futile to suggest that the coconut trees be cut down. Possibly they help, by transpiration, to dry the soil.

Sewage: Pit latrines are used as a rule. There are a few latrines over the sea and some houses have water closets and cemented-over soakage pits. The villages are fairly well supplied with latrines of the pit type and these are inspected at intervals. Garbage is collected by a truck under control of the District Board and dumped outside the town where it is fired.

Vaccinations: 185 successful vaccinations were performed during the year.

Infant Welfare Clinic: There were 245 children on the register of the Welfare Centre and the average attendance at the 45 sessions held from January to December was 32. 57 infants attended for the first time. The number of babes nine months and under was 80 of whom 27 were bottle fed, 27 were breast and bottle and only 26 entirely breast fed. This amount of artificial feeding seems altogether too high and mothers were urged to breast-feed further additions to their families. Certainly many of the infants have improved remarkably since they began to attend the Welfare Centre which is practically run by very efficient and regularly attending ladies. Figures from April to December show that there were 242 attendances of infants from the Centre at the out-patient department.

School Medical Work: 606 school children were physically examined during the year particulars being recorded in a card-index system. It would be an improvement in future examinations to make a note, where possible, of the race to which each child belongs, as the presence of, say, a few Creole children in an Indian school, because of their larger physique, lessens the value of average bodily measurements from an anthropological point of view. Nor can the weight of the small boned and lean East Indian child be compared with that of the other races without taking his descent into consideration. 36% of the children in Corozal Town schools had enlarged spleens. In the villages, of those examined, the percentage was 37%. Quinine bisulphate tablets were given to the children of most schools and all teachers are agreed that they were of great value, their judgment being based on a higher rate of school attendance. The fact that the school teachers ask for more tablets indicates their belief in the efficiency of the drug. Talks on Sanitation were given by the Medical Officer to the two larger schools in Corozal.

IV. PORT HEALTH WORK.

6,833 persons reported for quarantine purposes, chiefly to and fro travellers from Chetumal, Mexico. No quarantinable disease was discovered among them.

V. HOSPITAL AND DISPENSARIES.

There were 321 admissions to the hospital and 858 attendances at the Out-patient department. The operating theatre was improved by the addition of a cement floor and two extra wash basins with a tap supply of water from the vats. Part of the old tile roof was blown off by a whirlwind and it was thought expedient to have a new roofing of corrugated iron.

VI. PRISON.

The sickness rate among the prisoners was not high. The Medical Officer recommended that the cells be altered to give better ventilation. A bed for the use of sick prisoners is very necessary as the floor is somewhat chilly at night in the cooler months.

EXAMINATION OF SCHOOL CHILDREN, COROZAL.

ANALYSIS OF CARD INDEX, 1938.

	Church of England		Wesleyan		Roman Catholic		Total for Corozal		Out-District	
	No.	%	No.	%	No.	%	No.	%	No.	%
Males	20		64		161		245		71	
Females	21		67		148		236		55	
Total ..	41		131		309		481		126	
Spleen P.D.I ..	0	—	8	6	38	12	46	9.5	10	8.0
1	9	21	16	12	61	19.5	86	17	12	9.5
2	2	5	17	13	16	5	35	7(a)	16	12.6
3	2	5	0	—	3	.9	5	1	7	5.5
4	0	—	0	—	0	—	—	—	2	1.6
Total Spleens ..	13	31	41	31	118	38	172	35	47	37
Nutrition :		(b)		(b1)		(b2)				
Good	23	56	115	88	273	88	411	86	107	85
Moderate ..	17	41	13	10	32	10	62	12.8	19	15
Bad	1	—	3	—	4	—	8	1.6	0	0
Teeth	10	24	29	22	58	18	97	20	9	7
Anaemia clinical	16	39	38(c)	29	43(d)	14	97	20	27(e)	21
Gross anaemia ..	1	—	—	—	—	—	1	—	1(f)	—
Conjunctivitis ..	2	—	27	20	153	49	182	37	49	39
Skin	0	—	11	—	19	—	30	6	9	7
Tonsils (g) ..	1	—	18	13	68	22	87	18	27	21
Adenoids (h) ..	0	—	0	—	6	—	6	—	3	—
Lungs (i) ..	0	—	3	—	7	—	10	2.7	4	3.1
Heart (j) ..	3	—	6	—	15	—	24	5	11	8.7
Umbilical hernia ..	2	5	8	6	14	4.5	24(k)	5	6	4.6
Hernia	0	—	0	—	0	—	0	—	1	—
Undescended testicle ..	—	—	—	—	—	—	—	—	2	—
Ears	0	—	1	—	2	—	3	—	0	—
Phimosis	0	—	1(l)	—	0	—	0	—	0	—

(a) Spleens larger in out-district.

(b) Cannot be compared with (b1), (b2) as different M. O's. were concerned.

(c) 19 with enlarged spleen.

(d) 23 ditto.

(e) 20 with hookworm, 12 hookworm & spleen, 5 spleen only.

(f) Old hospital case of hookworm.

(g) Enlarged but not diseased.

(h) Judged by facies and history.

(i) Chiefly bronchitis and asthma.

(j) Functional murmurs.

(k) Mostly Crocoles.

(l) Requiring operation.

El Cayo District, Medical and Sanitary Report.

Dr. W. A. S. GEORGE, *Medical Officer.*

The district of Cayo has an area of 1,830 square miles and an estimated population of 7,387. The population is 4.03 per square mile.

Rainfall—rainy days 75. Total rainfall 59.48 inches.

I. ADMINISTRATION.

(a) Staff.

Medical Officer

Nurse-in-charge

Probationer

Wardmaid, Messenger and Cook.

II. PUBLIC HEALTH.

(a) General Remarks.

The general sanitary condition of the district was much improved and particularly the town of El Cayo.

The configuration of the land in this district is generally conducive to good drainage being chiefly valleys and hills. There are, of course, a few areas definitely swampy, but most of these even dry up in the dry weather.

There was an outbreak of Alastrim in San Antonio which was started by a person with the disease crossing the border from Guatemala. On its discovery, it was promptly dealt with and stamped out.

COMMUNICABLE DISEASES:

(a) Mosquito and Insect borne:

Malaria 698 cases with 2 deaths.

(b) Infectious disease:

Influenza 512 cases with 4 deaths.

Tuberculosis 23 cases with 2 deaths.

Alastrim 75 cases.

Gonorrhoea 138 cases.

Syphilis 130 cases.

(b) Vital Statistics.

Estimated population of the district 6,000

Total Births 260

Total deaths 109

Total vaccinations 425

Infant mortality under one year 24

III. SANITATION AND HYGIENE.

(a) Administration.

There is one Sanitary Inspector employed and controlled by the Local Board.

(b) Preventive Measures.

(a) *Mosquito and Insect Borne Disease*: All water receptacles are wired, fished or oiled. Weeds and bush cut and removed. Low areas drained and filled-in pools oiled. The towns of Cayo and Benque Viejo are inspected monthly by the Sanitary Inspector.

(b) *Epidemic Disease—Small Pox*: 75 cases of alastrim were seen in San Antonio. It was introduced from Guatemala. In the remote villages on the open frontier there is nothing to prevent crossing and recrossing. All contacts were duly vaccinated, and infected persons segregated; the outbreak disappeared as quickly as it had appeared.

(c) *Hookworm*: This is prevalent throughout the district. Routine treatment of all cases and periodical visits to villages and mass treatment of inhabitants with chenopodium appears to be bearing some fruit.

(c) General Measures.

(a) *Sewage Disposal*: The town of Cayo has 11 septic tanks and 219 pit latrines. The town of Benque Viejo has 4 septic tanks and 206 pit latrines. In the outlying villages there is a general deficiency of latrine accommodation which is gradually being overcome.

(b) *Scavenging*: In the towns of Cayo and Benque Viejo this is done by mule cart. The refuse being carted to dumps and periodically fired. It is proposed to replace the mule carts by motor truck.

(c) *Water Supply*: Chiefly river water. The town boards in Cayo and Benque Viejo have a few rain water vats and some of the inhabitants also have rain water vats. For some reason deep wells which are made use of in other parts of the Colony are practically non-existent here. The institution of purer water supplies is under consideration.

(d) *Surface Drainage*: Both towns have a fair number of stone drains, which are periodically cleaned and work well. Yearly improvements or additions are made where required.

(e) *Clearance of Bush and Undergrowth*: This is done periodically by the district boards in the towns.

MEASURES TAKEN TO SPREAD THE KNOWLEDGE OF HYGIENE & SANITATION.

Infant Welfare Clinic:

The Cayo Infant Welfare League is quite a live body, but unless the workers keep behind the mothers they are inclined gradually to drop out. The card system has not as yet been introduced but it is proposed to start it early in 1939. New quarters have been obtained for the League but as some alterations are necessary it was thought fit to carry on in the same place till the new place has been made ready.

Total number of attendances for the year	1,343
Total number who received necessitous relief	234
Total number who reported sick	295
Cash in hand at the end of the year	\$96.32

School Inspection: Systematic school inspection and examination has been carefully carried out during the year. One notices with pleasure a distinct change for the better on successive visits. I am glad to report the hearty co-operation of all managers and school teachers in the schools visited. If a sum of money could be made available for supplying fresh cows' milk where available for those children that needed it, it would be a step in the right direction.

The results obtained in the various schools examined are tabulated on a percentage basis:—

SCHOOL	Total Examined	Number Unvaccinated or not showing marks %	Malaria %	Enlarged Spleen %	Rickets %	Pediculosis %	Hookworms %	Round Worms %	Nutrition good %	Nutrition Moderate %
St. Joseph, Benque Viejo	M. 93 F. 127 — 220	28.18	—	2.27	8.18	34.54	—	22.72	78.18	21.81
St. Ignatius, Cayo	M. 101 F. 90 — 191	28.75	—	—	16.23	34.03	—	6.81	99.45	.55
St. Andrews, Cayo	M. 23 F. 28 — 51	41.17	1.90	1.90	7.84	5.85	—	9.80	88.26	11.74
St. Helena School	M. 42 F. 27 — 69	43.47	2.89	2.89	4.34	30.43	—	18.84	72.46	27.54
Succotz School	M. 16 F. 32 — 48	20.83	—	—	8.33	58.33	4.17	10.40	95.83	4.17

The Rickets was of a very mild type and existed chiefly between the ages of 6 and 9 after which it seemed to disappear entirely. This apparently was due to some errors diet in infancy; probably the child lived on some cheap condensed milk along with starch in some form. The percentage of malaria was almost nil or very low and the same applies to enlarged spleens. Pediculosis one found fairly common but some improvement has already taken place.

IV. PORT HEALTH WORK AND ADMINISTRATION.

Reporting, inspection and examination of persons coming in from Guatemala via Folleburn is unsatisfactory. A small station should be erected near the junction of the boundaries on the Peten road with an officer who could in addition to quarantine duties be Customs and Police Officer.

V. HOSPITALS AND DISPENSARIES.

Number of beds:

Male	7
Female	4
Private	2
	—
Total	13
	—
Daily average	7.46
Total number treated	243
Total number of deaths	13
Percentage of deaths	5.3
Major operations	2
Minor operations	127

Sufficiency of Accommodation: Generally speaking it is sufficient except during the heavy mahogany season when at times serious accident cases have to be accommodated.

Improvements: A new operating theatre has been installed, also modern bathrooms for males and females consisting of bath, W. C., and wash basins. This supplies a long felt want, but the supply of water is limited. A midwifery unit is required, also special nurses quarters. Electric lighting is an essential to replace the kerosene lamps at present in use.

Weekly visits are paid to the Government dispensary at Benque Viejo. A suitable motor boat for all weathers for this district would be a distinct asset. Suitable Rest Houses at various villages; provision of a travelling district nurse and Sanitary Inspector would all tend to bring better medical relief and give a better handling of the hook-worm and malaria problems in the out-districts. The provision of a small hospital and midwifery unit at Benque Viejo and the provision of Government district midwives at Cayo and Benque Viejo would be a step in the right direction.

VI. PRISON.

The Prison was kept in a clean state and a new latrine was dug to replace the old one. The health of the prisoners was fairly good. The prison was inspected periodically by the Medical Officer and the Sanitary Staff. Special accommodation should be provided for females.

Appendix IV.

Orange Walk District, Medical and Sanitary Report

Dr. P. E. McI. CLARKE, *Medical Officer.*

The Orange Walk District is about 1,460 square miles in area. The population is approximately 6,573. The various villages are scattered throughout the District at quite considerable distances apart. Communication is particularly slow, either by river or on horseback.

I. ADMINISTRATION.

(a) *Staff.*

The Staff consists of a:—

Medical Officer

Nurse-in-Charge

Wardmaid, Cook and Messenger.

One Student Nurse was taken on from 1st November, 1938.

The duties of Medical Officer, Orange Walk, in conjunction of those of Medical Officer, Corozal, were performed by Dr. D. W. Degazon from the 1st January to 15th March; by Dr. H. S. Rassim from 16th March to 6th April; and by Dr. T. Patterson from 7th April to 4th June. Dr. P. E. McI. Clarke performed the duties of Resident Medical Officer, Orange Walk from the 5th June to the end of the year.

II. PUBLIC HEALTH.

(a) *General Remarks.*

The general improvement in the health of the population observed in 1937 has been maintained.

The outstanding diseases met with in this District are:—

(a) Malaria, (b) Helminthic Diseases, (c) Venereal Diseases, (d) Dysentery, (e) Deficiency Diseases.

Malaria is by far the most common cause of ill health. Forty cases were treated in Hospital with two deaths. Venereal Diseases—chiefly Gonorrhoea and climatic Bubo—are the cause of much incapacity in the Mahogany camps, but unfortunately energetic treatment cannot be carried out under existing conditions.

Five cases of Pulmonary Tuberculosis came under observation, one of which was admitted to Hospital for a short period for treatment of complications. It is not the practice, however, to encourage admission to Hospital, of persons suffering from Pulmonary Tuberculosis.

(b) *Vital Statistics.*

	1937	1938
Total Population	6,513	6,573
Total Births	187	167
Birth Rate per thousand	28.1	25.4
Total Deaths	117	107
Death Rate per thousand	18.0	16.2
Infantile Mortality per thousand	114.7	149.7

III. HYGIENE AND SANITATION.

(a) *Administration.*

One Sanitary Inspector is employed in Orange Walk and makes a report to the Medical Officer each week. Notices are served on owners of lots, water receptacles and latrines where these are not kept in a sanitary condition. All notices served during the year were complied with.

(b) *General Measures.*

Scavenging: Refuse is removed by cart to a dumping ground just outside the town and fired periodically. Scavenging is supervised by the Sanitary Inspector.

Disposal of Excreta: There are a few septic tanks in the town of Orange Walk, but pit latrines are constructed on all other premises. Efforts were made to induce residents in all the villages to construct latrines; some villages responded promptly while others are still backward in this respect.

Water Supply: Vats and drums are kept for storing rain water. There are five public vats in the town of Orange Walk and several private ones. Well water is largely used in the dry season, and in some outlying villages river water is the main source of supply.

Drainage: There is room for improvement in the drainage of certain parts of the town of Orange Walk. In the rainy season accumulation of water in these areas constitutes a menace.

Bakeries: Three Bakeries were in operation during the year. Monthly inspections were made by the Sanitary Inspector and all employees were medically examined every three months. Notices were served on two owners to effect certain sanitary improvements and both notices were complied with.

Slaughter House: The Sanitary Inspector inspected all animals slaughtered and all meat offered for sale for human consumption. Acting on the report of the Sanitary Inspector the Medical Officer examined one animal and refused to give permission for slaughtering on the ground that it was unfit for human consumption.

Market: The Market was repainted during the year and all meat exposed for sale was suitably protected from contamination.

MEASURES TAKEN TO SPREAD THE KNOWLEDGE OF HYGIENE AND SANITATION.

(a) *School Inspection:* Seven schools were visited in the course of the year and every child present was medically examined and a record made.

The following table illustrates the degree of Splenomegaly among those children examined:—

Date of Visit and School	Number of Children examined	Number with enlarged spleens	% of Spleens
June—St. John's San Jose, (Hillbank)	24	7	29.17
July—San Roman, R. C.	63	2	3.17
August—Crooked Tree	101	6	5.94
August—Tie Tie Bank	29	1	3.44
August—Lemonal	48	5	10.42
September—St. Peter's, Orange Walk	32	1	3.13
December—Orange Walk, R. C.	214	29	13.55
Totals	511	51	

Mean Spleen Rate—9.98%.

Altogether sixty children were treated for Hookworm, Ascariasis and other minor ailments. A supply of quinine was issued to the teachers for distribution to sick children and to those exhibiting large spleens. Certain children attending the Orange Walk Roman Catholic School, who were obviously undernourished, were recommended by the Medical Officer for free meals during school hours.

The Senior Medical Officer made a tour of the District in the early part of the year and medically inspected all the school children in the villages he visited.

(b) *Maternity and Infant Welfare:* Maternity work is carried on by Handiwomen—there being no trained Midwife in the District. The hospital has no accommodation for maternity cases, and only very abnormal cases are admitted to Hospital when space permits. There is urgent need for a Maternity Ward to be attached to the Hospital, especially as there is a growing tendency for expectant mothers to apply for admission to Hospital for confinement. There is little or no ante-natal treatment practiced.

The Orange Walk Infant Welfare League continues to hold weekly clinics. The assistance given by lay-helpers with but one or two exceptions is not encouraging. Mothers are taking more advantage of the services rendered, and the employment of a Health Visitor should help to make the League's work more useful.

V. HOSPITAL AND DISPENSARIES.

During the year a new departure was made from the usual terms of service of the Medical Officer by the signing of a contract between the Government and the Belize Estate and Produce Company Ltd., whereby the Medical Officer was obliged to make bi-monthly visits to the Company's Mahogany Camps. The contract came into operation from the month of June 1938, when I took up the appointment of Resident Medical Officer, Orange Walk District.

From June 16th, 1938, to the end of the year twelve visits were made to Hill Bank, Sierra de Agua, Governor's Creek and San Jose. Each visit extended over four days. 235 persons were examined and treated; the largest number being seen during July and August.

Hospital accommodation in Orange Walk consists of 6 Male beds, 4 Female beds and one Private ward.

	1937	1938
Total number of admissions	153	125
Total number of deaths	13	8
Average daily number	4.42	4.6

During the year separate male and female baths were installed along with proper sanitary conveniences.

Another trained or partially trained Nurse is desirable, such a Nurse could conveniently discharge the duties of health visitor in the town of Orange Walk with her Hospital duties.

VI. PRISON AND POLICE STATION.

These premises were kept in a satisfactory condition and the health of the prisoners was satisfactory.

Appendix V.

Stann Creek District, Medical and Sanitary Report.

Dr. E. C. SAVONA, *Medical Officer.*

The District of Stann Creek has an area of 840 square miles and an estimated population of 6,425. The population is 7.55 per square mile.

There are no private practitioners resident in the district; the Medical Officer is allowed private practice. There is one private Chemist and Druggist.

I. ADMINISTRATION.

(a) *Staff.*

The staff consists of:—

Medical Officer
Nurse-in-Charge
Staff Nurse in charge of Maternity Ward
Two Wardmaids
One Attendant
Two Unpaid Student Nurses
One Cook and One Messenger.

The duties of Medical Officer were performed by Dr. L. M. Ram from 1st January, 1938, to 1st September, 1938; he was relieved by Dr. Savona on 2nd September, 1938.

There is no dispenser or clerk on the hospital staff; compounding has to be done by the Medical Officer and Nursing staff, the latter also collecting Hospital fees; very unsatisfactory arrangements for the working of the department.

(b) *Finance.*

712 In-Patients were treated at an average cost of \$23 per caput. Of these 5.9% were 3rd Class Patients, 26.37% were 4th Class Patients and 56.7% were 5th Class Patients, leaving a balance of 11.1% in Court, Police cases and non-paying labourers.

The receipts amounted to \$417.75 and the debts at the end of the year amounted to \$141.50.

II. PUBLIC HEALTH.

(a) General Remarks.

The prevalent diseases are the same as are met with in the Colony with perhaps a major incidence of Diabetes, Malaria and Tuberculosis which head the list of killing diseases; venereal disease is more common than in the Toledo District, the reason very possibly being that there is more traffic with the capital of the Colony.

Prevalent Diseases.

Malaria: This forms the bulk of all treatments and is moderately severe in degree during the latter months of the year. Of a total number of cases amounting to 629, in-patients (259) and out-patients (400), there were 20 deaths. There were in all 35 certified deaths in the district with an added number of 10 registered uncertified deaths probably due to Malaria. The hospital books showed 7 cases of Cerebral malaria and 5 of Blackwater Fever, with 4 and 1 deaths respectively. On purely clinical grounds the majority of cases would appear to be Subtertian Malaria, however, the Benign type is also quite common, both types being more common during the latter quarter of the year.

Tuberculosis: There appears to be a considerable amount of Pulmonary Tuberculosis in this district. 13 cases were actually reported.

Venereal Diseases: These diseases are very prevalent in this district; many cases are discovered by routine investigations with the Kahn reaction. Arsenical and mixed treatment for ulcers appears to clear up these conditions which were previously thought to be tropical ulceration. A more detailed survey is required. Gonorrhoea is common. Soft sore is frequently found but climatic buboes are more common.

Propaganda and a more concerted effort to tackle this social problem is urgently required.

Heiminthiasis: Ascariasis seems to predominate. Ankylostomiasis is seen frequently in the district.

Nutritional Diseases: No fresh survey has been made since the publication of the Nutrition Report of the Colony. However, dental caries and low resistance to skin infections amongst the school children, also anaemia, neuritis due to lack of Vitamin B and complex are problems which require attention.

Small Pox: Vaccinations: 145 children and adults have been vaccinated during the course of the year. This represents 8 vaccinated by the Sanitary Inspector for purposes of quarantine, 60 children pertaining to Stann Creek vaccinated by the Nurse-in-charge, and 77 cases of children in the out-district vaccinated by public vaccinators. The institution of School Inspections is tending to put the matter on a more satisfactory footing since a lot of individuals that escape vaccination come under observation and are done as routine. The institution of vaccination tours after vaccination field registers are made out of the Birth Register will also tend to the more universal vaccination of the child public.

(b) Vital Statistics.

	1936	1937	1938
Total Population	6,250	6,349	6,425
Total Births	201	176	187
Total Deaths	102	77	111
Crude Birth Rate per mile	32.4	27.7	29.1
Crude Death Rate per mile	16.3	12.1	17.3
Deaths under 1 year	19	15	25
Infantile Mortality per mile	90	85.2	144.3
Morbidity Rate per mile		287	375
Malarial Morbidity per mile		130	102
Malarial Fatality Rate per mile		3	2.3

III. HYGIENE AND SANITATION.

(a) Administration.

There is one Sanitary Inspector and one Assistant Sanitary Inspector employed and controlled by the District Board.

(b) *General Measures.*

Housing: This will be the subject of special report in 1939. Many houses are unsafe, there is much over-crowding, poor ventilation and illumination. Storage of water and sanitary conveniences are lacking, or if present, very rudimentary. No building bye-laws exist and are urgently needed.

Infant Welfare Clinic: This was started in June 1936 without the help of lady workers. A native trained midwife is the Health Visitor and runs it practically single-handed. All new cases and those requiring treatment are examined by the Medical Officer and all sick babies are referred to him for treatment the following day. The Nurse-in-charge does the necessary treatment and fills up the prescriptions required not only for cases found at the clinic, but also for sick cases found on the rounds of the Health Visitor who receives an honorarium from the District Board which will not be continued after the end of the year. The clinic room is unsuitable in position and inadequate for use. A card index system is being introduced next year for a greater ease and for more accurate and exhaustive records. There are now 343 children on the register, mostly Caribs.

Industrial School Pomona: The health of the inmates has been very good all through the year. There were 111 admissions to the hospital and these were mostly for septic sores and fly bites besides cases of hospitalization for malaria which accounts for as much as 65% of admissions. The School was inspected regularly during the year and the condition of sanitation was found to be satisfactory within the means and conditions of the school. The buildings have been allowed to fall in disrepair and there is marked room for improvement in the matter of housing.

Labour Camps on the Rail-cum-Road Works of the P. W. D.

Periodical inspections were carried out either by the Medical Officer or the Sanitary Inspector or both. The latrines were invariably in insanitary condition and were attended to invariably only after the remonstrations of the Medical Officer who on two occasions required their being shifted. It would appear that the men would rather make use of the nearby bush and regard this matter of control as purely a joke. They have been known maliciously to pull down the woodwork of the latrines.

IV. PORT HEALTH WORK AND ADMINISTRATION.

Quarantine: This was done as in previous years. But the number of persons to Quarantine keeps decreasing steadily with the greater vigilance of the emigration authorities in the Republics. There were 535 people reporting to Quarantine during 1938 and 75 boats were given pratique. An embarrassing problem, simply because the service is disorganized at present, arises from the plane service running weekly between Belize and Barrios. Though such boats are usually met by the Medical Officer, there is no information available whether these planes reach Stann Creek by way of Punta Gorda or direct from Barrios in the which case any approximation of the provisions of the International Sanitary Convention for Aerial Navigation of 1933 goes by the board. There is grave danger attaching to this practice if planes were to connect or reach the Colony from further inland or around the Panama Canal Zone.

V. HOSPITAL.

This comprises 20 beds for the treatment at its fullest capacity of 8 male patients, 8 female and 4 maternity. This accommodation can in no way be regarded as generous, inasmuch as quite a number of applications for admission have to be turned down at times. A large number of persons receive treatment as out-patients, but the majority of people in the Valley applying for treatment have of necessity to be treated in the Hospital.

The increasing popularity is borne out by the following admissions during the years:—

1934	400
1935	450
1936	430
1937	480
1938	712

Because of this, and also because of the increasing number of confinements in the Hospital when the ante- and post-natal service are initiated, as also the impossibility of treating adequately the more prevalent diseases in out-patients, it were desirable that accommodation be increased *pari-passu* with the aims of expansion as they are achieved.

There were 712 admissions to the hospital during the year: 343 males and 269 females. In addition 1,708 people were attended to in out-patients with 4,336 attendances. The diseases treated in the hospital were the following:—

	No. of cases		Deaths	
	1937	1938	1937	1938
Malaria—all types	173	259	11	13
*B. W. Fever	—	8	—	1
*Cerebral Malaria	—	2	—	4
*Algid Dysenteric	—	4	—	4
Other Diseases.....	50	20	1	—
Skin, Bone & Cellular Tissues	45	50	1	—
Venereal Diseases	40	60	—	1
Puerperal Fever	35	57	—	3
Respiratory Diseases	26	49	2	12
Dysentery	19	18	1	4
General Diseases	18	33	1	1
Nervous Diseases	16	15	1	1
Genito-Urinary Diseases	15	38	—	1
Circulatory Diseases	14	17	1	1
Pulmonary Tuberculosis	8	13	1	—
Alimentary Diseases	7	25	1	5
Other Infectious Diseases	5	9	—	—
Births	8	59	1	4
Totals.....	480	712	21	46

*These are included in the total given for Malaria—all types.

Summary and Conclusion.

The following report was submitted by Dr. Ram:—

The buildings for the schools are insufficient as most of the classes are held in the same room at the same time. Although seats and desks are unsatisfactory there are no orthopaedic defects amongst the pupils. Perhaps plenty of sunshine and open air, shorter hours, very elementary education not requiring much concentration and writing, frequent absences when children help their parents in home and field work, greatly contribute towards the prevention of these defects. It was not possible to test Vision but except for Follicular Conjunctivitis which perhaps is another sign of poor nutrition, the children are remarkably free from external Eye Diseases. Similarly, Ear, Nose and Throat diseases are conspicuous by their absence. Heart, Lung and Nervous diseases amongst the children are a rarity. Poor Nutrition, Enlarged Spleen, and Carious Teeth are the three most frequent defects met with. Absence of shoes may be either a matter of habit, or an index of insufficient clothing, or of economic condition of the populace. Sanitary arrangements in most of the Schools are very poor and something ought to be done in this direction. At least some enamel or paper drinking cups should be provided.

The number of defects found in this preliminary examination is enormous. Out of 1,294 children, with 905 average attendance, 1,074 were examined with 1,259 defects (both tabulated and untabulated). 257 were unvaccinated, and 882 had no shoes on. The tabulated defects of Caribs and other children can be readily seen in the following table:

Defects:	Caribs	%	Others	%
Number examined	665		409	
Poor Nutrition	263	39.5	133	32.5
Enlarged Spleen	132	19.9	116	28.4
Carious Teeth	103	15.5	149	36.4
Tonsils & Adenoids	68	10.2	50	12.2
Enlarged Glands	34	5.1	39	9.5
Follicular Conjunctivitis	32	4.8	26	6.4
Without shoes	631	94.9	251	61.4

841 children belonging to Stann Creek and Mullins River Schools were examined towards the end of Malarial season last year. A table of heights and weights of 224 boys and 239 girls of different ages (see table attached to Annual Report 1937) revealed the facts: 1. That girls after the age of ten are better developed than boys of the same

ages up to 15 years. 2. Both boys and girls compare favourably in height and weight with children of other Tropical Countries like Ceylon for example. Here are the detailed defects of these 841 children:

CARIBS

Defects	Male	%	Female	%
Children examined	270		262	
Poor Nutrition	109	40.4	108	41.2
Enlarged Spleen	56	20.7	44	16.8
Carious Teeth	47	17.4	47	17.9
Tonsils and Adenoids	30	11.1	35	13.4
Enlarged Glands	18	6.7	8	3.1
Follicular Conjunctivitis	21	7.8	15	5.7
Without shoes	263	97.4	250	95.4

OTHERS

Defects:	Male	%	Female	%
Children examined	155		154	
Poor Nutrition	63	40.6	53	34.4
Enlarged Spleen	59	38.1	31	20.1
Carious Teeth	53	34.2	57	37.0
Tonsils & Adenoids	19	12.3	17	11.0
Enlarged Glands	12	7.7	13	8.4
Follicular Conjunctivitis	5	3.2	2	1.3
Without shoes	122	79.7	55	34.7

It can be easily seen from these tables that Caribs have less splenic enlargement and fewer dental defects, while the Creole girls are the best looked after children, (only about 35% show poor nutrition and the same number without shoes). From the incomplete data of height and weight it appears that both Carib boys and girls are slightly less developed than Creoles.

Newtown children comparatively show a large number of defects, and look a bit more listless. Most of the children require extra feeding and clothing. If any funds be available, I certainly would recommend this school for favourable consideration.

Appendix VI.

Toledo District, Medical and Sanitary Report.

Dr. H. S. RASSIM, *Medical Officer.*

The district of Toledo has an area of 2,125 square miles and an estimated population of 6,430. The population is 3.03 per square miles.

I. ADMINISTRATION.

(a) Staff.

The Staff consists of:

Medical Officer

Nurse-in-charge

Probationer Nurse

Wardmaid, Cook and Messenger.

The appointment of a second qualified nurse to Punta Gorda Hospital has improved the position. The anaesthetic training of this nurse was very useful in performing any slight or major emergency operations needed.

Four students were taken for local training; these students received lectures, instructions and demonstrations from the nurses and the Medical Officer; their progress is satisfactory.

II. PUBLIC HEALTH.

(a) *General Remarks.*

Malaria: The topographical formation and the small percentage of swampy areas in this district do not seem to make very much difference to the percentage cases of malaria, in comparison with the other Districts. Malaria is more common among the Maya Indian races due to re-infection and insufficient treatment. During the year, one-third of the total certified deaths was due to malaria. The actual figures were, 14 died of malaria and the total number of certified deaths was 42. No doubt a large percentage of uncertified deaths which were recorded as "fever" were also due to malaria. 109 cases of malaria were admitted and treated in the Hospital with three fatal results. Anaemia with malaria is extremely common. It is interesting that some of these clinically obvious cases of malaria do not respond to quinine therapy or any other therapy very favourably. In some cases a combination of several therapies had to be applied. In a few cases one dose of organic arsenic compound followed up by quinine therapy had to be given to control the fever due to malaria.

Helminthiasis: This infection is extremely common although a diagnosis is made usually by clinical observations; the cases respond to the treatment. It could be said that 100% of the Maya Indian races are infected; whenever an Indian is hospitalised for any cause, he is treated for hookworms. From superficial investigations in the villages, it can be seen that the cause of infection is due to inadequate sanitation and lack of, or inadequate, footwear. Most Indian villages are without latrines. There is usually one latrine belonging to the Cabildo used exclusively by official visitors to the village. Some Indian villages have one latrine for the school children but the rest of the village uses the bush immediately surrounding the village. In one Indian village, the administration of medicine for hookworm increased the school attendance by about 24%. According to the Schoolmaster's report, the general condition of the pupils was much better and the children appeared brighter.

Hookworm infection is common in a lesser degree among the town dwellers.

Microcytic anaemia as a result of hookworm is extremely common, but often accompanied by malarial splenomegaly. The combination of these two ailments reduces their vitality and their resistance to other kinds of infection. This is very obvious in gravid women; a few cases having died without responding to any treatment. If these anaemia cases are seen in time, and hospitalised, massive doses of iron and arsenic with liver therapy after de-worming, help the condition, but it is unfortunate that most cases come too late. It seems that the only chance of saving such cases is by repeated blood transfusions. Few cases can afford liver therapy.

Tropical Ulceration: As barefeet afford no protection, many cuts, abrasions and insect bites are received. These minor lesions do not heal but turn into large chronic ulcerations. Adequate dressings are not applied, often a piece of leaf or some candle grease is used as a dressing. Even when they are hospitalised it takes a very long time for ulcers to heal; in some cases skin grafts were necessary. Many of the sufferers are Mayan Indians.

Among the sores leishmaniasis of the ear is fairly common. These patients are often treated outside by "bush doctors".

Venereal Disease: Several clinical cases of syphilis have been seen; they often refuse the Kahn test; however, nine Kahn tests were positive. These received anti-syphilitic treatment with satisfactory improvement, but unfortunately, the people are not educated enough to realise the meaning of syphilis and the length of treatment required. Some of them are so greatly improved after a few injections that they cease to attend for further treatment.

Gonorrhoea: Gonorrhoea is very common. It seems that practically every person during some time of their life has acquired this infection. There is no clinic to offer the patients proper treatment. Men and women are about equally infected. Women very rarely come to the Hospital at the early stages of infection but wait until abdominal symptoms such as pelvic peritonitis or salpingitis set in. Male patients occasionally attend the Hospital to receive instructions but the majority of the patients are treated by "bush doctors" or by midwives. Complications such as strictures, retention of the urine and perineal abscesses are common. These are treated as in-patients.

Tuberculosis: This, except for a few old chronic cases, is rare. Three cases were

Clause 1, the Schedule, Clause 2 and the Title of the Bill entitled "An Ordinance to appropriate certain sums of money for the use of the Public Service of the Colony

seen during the last stages of the disease and they all died within a short period. The families are kept under observation. Early cases are not seen.

Rabies: During the year 1938 there was an outbreak of rabies in this District; it was imported by two dogs from Belize. Both these animals, after becoming rabid, quickly spread the disease. Twenty-eight animals, mainly dogs, pigs, cattle and horses, were infected. At first the position was not thought to be serious, but as the number of infected cases increased and the cases spread further afield, drastic measures were considered necessary. A muzzling order was imposed and the movements of animals from ranch to ranch and along the public highways were forbidden. Several unmuzzled dogs were destroyed at sight and gradually the outbreak subsided. In my opinion, rabies in this country is endemic.

Sporadic cases appear from time to time and probably some other small epidemics will be seen in the future. As there is heavy bush all over the Colony, especially in the Toledo District, and several of the rabid dogs, before they died seemed to disappear into the bush, it seems quite likely that some of the bush animals became infected and these may act as carriers of the disease. Nevertheless, this last epidemic conclusively was traced to the two dogs mentioned above.

(b) *Vital Statistics and Infant Mortality.*

Maya Indians: The death rate of the Mayan Indians in this District is alarming. The total number of deaths recorded among the Indians is 217 for the year 1938. Considering that there is about 2,000 Indians living in this District, this figure is about 10.1% of the total Indian population of the District. Compared with the birth rate which is only 128 for the year 1938, it is obvious that the race has decreased by about 4.5% during 1938. The Mortality Table will show the optimum age of death among the Indians from birth to old age; from a study of it it will be seen that the highest death rate for 1938 was amongst children under one year; the death rate reaching the minimum number of deaths between the ages of 10 to 19, with a sudden rise up to the age of 39 reaching the figure of 31; then a gradual drop to 60 years and a sharp drop over the age of 60. 176 people out of 217 have died between the age of 1 to 39. It appears also that only a small percentage of these people will ever reach full mature age. Furthermore, the death and birth rate of the Indian population during the last four years shows that there is an excess of 39 deaths over births. Although 1938 appears very alarming, if the average birth and death rates are taken, conditions are not as bad as they appear.

It is regrettable that the death rate among the Mayan Indian races should always be so high. This figure is just over two-and-a-half times as much as the previous year. Should this state of affairs continue, the race will be in danger of extermination.

	Births	Deaths
1935	132	160
1936	119	93
1937	135	86
1938	128	217
	<hr/>	<hr/>
Total	517	556
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Excess of deaths over births 39

On enquiring into the causes of death amongst them, I learned that they have the following very peculiar custom. During the burning of their milpas they often eat a large quantity of ash and the hot earth immediately below the ash. After harvesting their tobacco, some of them often burn the stem of the tobacco plant and eat the ash. The more enlightened Indians claim that, especially those who eat the ashes of the tobacco plant, "it makes them very ill". It is a local belief that a certain proportion of death is due to the consumption of ashes and earth, especially tobacco ash. I cannot make out whether this is an old tradition or just a bad habit amongst them.

Births and Deaths: The total deaths for 1938 were just about twice as many as that of the previous year. The high rate of death amongst the Maya Indians, as mentioned in a previous paragraph, is responsible for this figure. The birth rate is higher than the previous three years but, nevertheless, comparing the total births with the total deaths of 1938, the deaths exceed the births by 1 as shown by the figures given below:—

TABLE X.**BIRTHS.**

Races	1935			1936			1937			1938		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
Indian	78	56	134	60	63	123	63	72	135	77	51	128
Carib	13	30	43	14	19	33	15	18	33	27	20	47
Negro	13	7	20	12	19	31	14	10	24	31	19	50
Other	35	40	75	25	40	65	42	38	80	34	35	69
Total	139	133	272	111	141	252	134	138	272	169	125	294

TABLE XI.**DEATHS.**

Races	1935			1936			1937			1938		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
Indian	86	73	159	53	40	93	44	43	87	117	100	217
Carib	14	19	33	6	12	18	11	3	14	13	13	26
Negro	10	10	20	7	7	14	10	8	18	7	9	16
Other	23	41	64	20	22	42	15	18	33	22	14	36
Totals	133	143	276	86	81	167	80	72	152	159	136	295

TABLE XII.**MORTALITY TABLE**

Ages in stated periods at time of death.

YEAR	Under 1 year	1—4	5—9	10—19	20—39	40—59	Over 60	Total Deaths
1932	28	18	13	9	45	20	28	161
1933	40	16	17	13	24	23	19	152
1934	34	12	12	12	26	23	12	131
1935	64	53	24	16	35	45	39	276
1936	30	19	8	15	32	31	32	167
1937	28	14	9	11	35	34	21	152
1938	68	56	30	22	38	46	35	295

III. SANITATION AND HYGIENE.

The town of Punta Gorda geographically is well situated. The natural slope of the place is so arranged that with proper channels it could easily be drained. The town slopes from the South-west corner down towards the sea, West and towards the North. The main slope is divided by horizontal depressions on the land which, in itself, forms a natural drainage system. Two little creeks which run zigzag fashion along these depressions actually drain the town better than the present artificial channels built for that purpose, especially at the back of the town which is almost entirely drained by these creeks. The town has three long parallel streets.

The District Board are seriously thinking of laying down 1414 yards of concrete drains on each side of the road for the following year.

Town of Monkey River: This Town is in an extreme state of neglect, although a recent movement by the Town Board has improved conditions in front of the town. The back of the town, Black Creek and the Cemetery are in urgent need of attention. Black Creek lies almost behind the town; it is a blind creek on which are built several latrines. It appears that the creek has not been cleaned for a considerable time and the local Board are considering having it cleaned during next year.

Cemetery: The cemetery is 100 x 100 yards. It is sandy ground. Immediately south of the cemetery the ground is higher and harder, and consists of clay. During the rains, the water runs from this slightly higher ground to the Cemetery and quickly turns it into a swamp. During the wet season if even part of the cemetery might not be swampy it requires only 6" of digging to reach water. Efficient drainage of the cemetery, such as having ditches cut right round the cemetery and conducting these to the main drains, might keep the place dry, but it is unfortunate that all the drains in the town need much careful attention.

Vats, Wells, Drains, Sewage: A recent Sanitary Survey of the town of Punta Gorda discloses the following figures:—

Number of Vats	98
Number of wells covered but not fished	4
Number of wells covered and fished	0
Number of wells uncovered but fished	5
Number of wells uncovered and unfished	22
Number of wells covered, with pump	1
Total number of wells	32
Length of concrete drains	777 yards.
Length of open drains	4128 yards.
Length of drains which require to be opened	7187 yards.

I think it is being enforced that all the wells in town be covered and fished.

It is very difficult to enforce any efficient disposal of night soil in this town. Some of the residents in the Back Street are still using the bush and others are emptying their small utensils into the creeks. There are about 41 families without even buckets. There is no "9 o'clock parade" in this town and it is very difficult to force them to have a "9 o'clock parade". Some of the houses are nearly a quarter of a mile from the sea and the roads are appalling, sometimes very muddy and extremely slippery ground.

The Villages: Having the "fajina" system, the villages are kept much cleaner than the towns. It is pleasant to report that some of the villages take a great pride in keeping their surroundings clean. The roads are cleaned periodically by themselves. During district tours, informal talks were given by the Medical Officer to the Alcalde and villagers.

Except for the town of Monkey River, the District is visited occasionally by the Medical Officer. Monkey River is visited monthly.

MEASURES TO BE TAKEN TO SPREAD THE KNOWLEDGE OF HYGIENE AND SANITATION.

(a) *Maternity Work.*

Except for one qualified midwife attached to the Hospital and one qualified midwife employed by a company working in this District, all the other midwives are unqualified. Their methods are very elementary and, unfortunately, hygienic and antiseptic measures are not observed. Most of these midwives have very little or no knowledge of hand-

ling premature babies. Several children died owing to unskilled attention. Infantile mortality for the year 1938 is alarming. It will be seen from the statistics that 68 children died before they were one year old. Maternal mortality is not so alarming; although most cases are in the hands of untrained midwives they seem to recover satisfactorily without any puerperal infection. In some Indian villages midwifery is carried out not by women but by men. Whether their results are any better than the female midwives could not be definitely ascertained. In the town of Punta Gorda, mothers are encouraged to attend the Hospital for ante-natal care but they are not encouraged to come to the Hospital for their confinements owing to lack of accommodation. It is pleasing to see the number attending the ante-natal clinic gradually and steadily increasing.

(b) *Infant Welfare Clinic.*

The year 1938 was satisfactory, although the total new registrations could not be obtained owing to confusion in registration numbers and the dates. It is satisfactory to see the changes taking place in the children since their attendance at the Clinic and surprising to see the difference in children who have newly registered. Medicines are given at the Clinic and children requiring special medication attend the Hospital out-patient Department.

During the year the following treatments were given:—

Treatment	Number of treatments.	Number of children who received treatment.
Quinine mixture	259	111
Cough mixture	123	74
For colds	129	65
For Skin diseases	286	94
For Diarrhoea	10	10
Worm medicines	73	57
Other medicines	40	28
For Umbilical hernia	34	34
For other diseases	28	28
Number of Clinics held		45
Total number of attendances.....		2,110
Average attendance per Clinic		46.89
Average number of treatments per Clinic.....		20.44
Percentage of sick children per Clinic		43.50
The largest attendance at any clinic was		65
The total number of children on the books is.....		233

A baby show was held on the 3rd November, 1938 and there were 48 entrants.

Balance in Treasury Bank at 31st December, 1938 was \$144.25.

(c) *School Medical Examination.*

The schools in Punta Gorda are periodically visited. Medical examinations of school children are carried out. The schools were examined in Punta Gorda, Monkey River, Barranco Village and the Toledo Settlement.

660 children in seven schools were seen. Some of the findings are as follows:—

Spleen as per Boyd's Classification.

	Number of cases	Percentage
P. D. I.	61	9.2
No. 1	47	7.1
No. 2	77	11.7
No. 3	20	3.0
No. 4	3	.5
Total number of Spleens	208	31.5
Non-vaccinated	124	18.8
Children with defective teeth	217	41.8
Clinically obvious Malaria	67	10.2
Clinically obvious cases of worms	103	15.6

It is interesting to note that a very large percentage of children are suffering from defective teeth. Some of these teeth are extremely septic and they have a very high degree of pyorrhoea. I am convinced in my own mind that the large degree of digestive disturbances, anaemias and ill-health is due to this septic focus.

IV. PORT HEALTH WORK & ADMINISTRATION.

Quarantine: The working of Quarantine is similar to previous years:—

Attended Punta Gorda Quarantine Station	530
Attended Barranco Quarantine Station	27
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Total	557
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Boats from the neighbouring Republics carrying clean Bills of Health are not asked to attend Quarantine Stations, but several small dories which just come in without any formalities are requested to report daily over a period of two weeks at the Quarantine Stations.

V. HOSPITALS.

The Hospital is becoming more and more popular among the inhabitants. The Indian population of the district no longer appears to resent admission. However, cases requiring long hospitalisation are often self-discharged. The official number of beds is eight but extra beds are put up and the number of in-patients is often raised by 50%. The number of cases admitted to the Hospital are as follows:—

Fifth Class	119
Fourth Class	153
Third Class	7
Left over from 1937	10
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Total	289
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The total number of days these 289 patients remained in the Hospital was 3,971 and the average number of patients per day was 10.9. The total number of deaths in the hospital was 22. \$384.50 only was collected in fees out of a possible \$588.60 owing. The increase in Hospital attendance is most marked during the wet season and the early part of the cold season. The cases admitted to the Hospital are mostly malaria and anaemia with helminthiasis; but other cases such as pneumonia, arthritis and surgical cases are quite common.

Appendix VII.

Report of the Senior Sanitary Inspector, Belize, for the Year 1938.

ADMINISTRATION:

During the first half of the year five Sanitary Inspectors were employed by the Town Board of Belize. At this time the position of Senior Sanitary Inspector was vacant, the Town Clerk in addition to his substantive duties acted in this position, but Sanitary Inspector Cervantes being Senior in the Service carried on the outdoor work.

The Staff was increased by one when Mr. K. C. Gardner arrived on the 11th of July in the Colony from Jamaica and took over the position of Senior Sanitary Inspector having been seconded to the British Honduras Government by the Jamaica Health Service for a period of one year. This Officer possesses fifteen years of practical experience in both Field and Office routine work, having had six years service with the Hookworm Control Unit of the Rockefeller Institute and the remaining nine years with the Municipal Board of the Parish of Trelawny, Jamaica, covering all phases of health work, as also a certificate of the Royal Sanitary Institute, London, which he obtained in the year 1929.

POLICY:

With the increase in Staff it was decided that there was an extra man who could be spared for work outside the urban areas but there being no provision made for travelling on the estimates, nothing could be done in this respect, although sometimes there was noticeable overlapping of work. The function of the Department during the year and particularly the latter half was to encourage co-operation and arouse health consciousness among the Staff itself as also the public. One innovation is that the work of a Sanitary Inspector should, in future, be intensive with concentrated efforts rather than extensive with less results, as also by reducing much of the clerical work of the Sanitary

Inspectors giving each man more time in the field. This policy aims at getting best results for the money spent on the service. The present idea is to get the whole Department working as one unit or machine comprising scavengers, cart men, and Inspectors.

It is indeed gratifying to note that in the Department there is now more harmony existing with far better results. The figures given below bear out the fact for more intensive work, but to accomplish such it is necessary that more thought be given to sanitation and a standardised programme for the Colony be adopted and enforced. On the whole, the future foreword of the Department will be that it stands for prevention of disease and the promotion of better health among the people whom it serves.

<i>Lectures:</i>	Public (Methodist Men's League)	1
	Schools	10

Communicable Diseases:

Number of visits of Investigation	36
Number of visits to Cases	28
Number of cases visited	28
Tuberculosis cases visited	12

<i>Other Diseases:</i>	Dysentery	13
	Diphtheria	1
	Typhoid	1
	Mumps	1

Number of cases isolated	13
Disinfections (Terminal)	9
Fumigations (Terminal)	2
Premises visited	24,778

<i>Latrines Completed:</i>	Water Closets	4
	Pits	1
	Buckets	9

Visits to Stables	210
Visits to Offensive Trades	85
Visits to School Latrines	318
Visits to Public Telephones	96
Visits to Latrines	2,351
Visits to Public Baths	152
Visits to Cold Storage	40
Visits to Public Institutions	59

Complaints received	152
Complaints investigated	152
Complaints adjusted	143
Nuisances Found (Dirty Yard—Rank Vegetation)	1,710
Notices served	1,710
Nuisances abated	1,686

	Dirty Yard	Rank Vege- tation	Repairs to tanks	Mosquito Breeding	Other Nuisances
Notices Served	388	798	208	291	25
Notices complied with	388	782	201	290	25

Applications received for Refreshment Shops, etc.	124
Permission granted	124
Visits to Bakeries	434
Visits to Ice Shops	28
Visits to Bread Shops	385
Visits to Factories	289
Visits to Restaurants, etc.	1,809
Visits to Groceries	1,082
Visits to Slaughter House	31

Visits to Market	259
Food Seizure (Details given elsewhere)	42
Number of Inspections of Food Handler's Certificates	889

Mosquito Survey:

Number of vats and tanks fished	1,010
Wells fished	14
Stagnant Pools oiled	5,774
Stagnant Drains oiled	961
Number of Mosquito Inspections (Domestic)	11,337
Number of receptacles found with larvae	1,180

	Wells	Tanks	Barrels	Other Receptacles
Number of receptacles inspected	153	6,543	1,297	3,344
Number found breeding larvae	19	743	297	121
Percentages	12.4	11.3	22.8	3.6

Number of receptacles oiled	56
Crab Holes treated and Destroyed	7,787

Mosquito Control:

Oiling of all pools of water within Belize was carried out during the year. Filling of lots in the Mesopotamia Area under the Reclamation Scheme and the building of new drains by the Town Board have helped in reducing former mosquito breeding places in this area. Some filling and the erection of new drains was also done towards the latter part of the year in the Freetown Area and it is the hope of the Department that this line of work will continue apace and further materially reduce the quantity of oil required to go through these areas.

Apart from the mosquito control this filling scheme should greatly enhance the value of properties and bring greater comfort to residents in these neighbourhoods. It might not be out of place to mention that during the latter part of the year, a large saving was effected on the quantity of oil used over the previous six months. It was practically demonstrated that the old system of applying a thick coat of oil on water was unnecessary and that the old belief that this prevented breeding for a longer time, was wrong, but that it was only necessary for oil to form a thin film to prevent larvae getting air from above the surface of the water and be killed by the toxic properties of the oil. However thick the application, the toxic properties are soon lost and no advantage is gained by an application of a thick coat, hence the saving.

Figures of *Stegomyia* breeding in tanks and vats are large as set out below. Because of the hesitancy and reluctance of people to obey verbal or written notices given them by Sanitary Inspectors, sometimes going the limit of treating the matter as jokes and allowing these offences to continue, it was decided to prosecute those who made it a practice. The Department, while not being unnecessarily hard in pressing for fines, and the Court being reasonable in punishing offenders, these prosecutions have had their effect; but it is regretted that such actions were necessary. Fishing of containers, barrels and drums, water not being retained in these for very long, is impracticable but quite good in tanks and vats; the death rate of fishes in vats and tanks is high. During the interim of two fishing periods mosquito breeding becomes rampant in these latter vessels, hence the necessity for proper screening being enforced. At present a Sanitary Inspector's time is not wholly given to the control of mosquitoes but to numerous other duties, hence the responsibility of persons owning or being in charge of vats and tanks, etc., to do their share.

Prosecutions against offenders for:

	Mosquito Breeding
Number of persons prosecuted	40
Fined	9
Cautioned	20
Dismissed	1
Withdrawn	10

Other Prosecutions Instituted:

	For Repairs to Vats	Leaking Faucets	Privy Nuisance	Rank Vegetation	Persons being em- ployed with- out Medical Certificate
Number of persons prosecuted	2	2	1	8	15
Fined	1	1	—	3	9
Cautioned	—	—	1	1	5
Dismissed	—	—	—	1	—
Withdrawn	1	1	—	3	1

Cases against offenders were withdrawn or they were found guilty and cautioned by the Court if the offence on which they were prosecuted had been remedied after the service of the summons on them or in some cases that it was the first time prosecutions against the person had been instituted on the present charge.

Bakeries:

Visits were made at weekly intervals by Sanitary Inspectors to five licensed bakeries and it was found necessary during the year to write the owners of four, complaining of the insanitary conditions then prevailing. After much cleaning they are now in fair order. Carts for conveying bread that were previously left open and had a dirty bit of canvas as protection, have now been improved. The Law requires that these be dust-proof. A dust-proof conveyance was provided for public institutions by Government for conveying bread from the Prison bakery to the Hospital, Poor House and Lunatic Asylum; this is a definite improvement. It is desirable that small places manufacturing unleavened bread, buns etc., for sale to the public should be controlled.

Schools:

One hundred and thirty-seven visits were paid to the schools yet sanitation as such is still of the primitive type. Promises given by managers that they intend effecting the necessary improvements during the coming year is encouraging. The practice of hygiene cannot be carried out although taught in these schools, not to mention the failure at any attempts in teaching sanitation. The accommodation for washing of pupils' hands is yet to be thought of.

Market and Slaughter House:

Defects from lack of proper cleaning were pointed out during the year at both institutions and these were attended to by the authorities in charge. Painting was done to the store for beef in the market and provision of proper cloth covers for beef in transit from the slaughter house to the market was made by butchers on being instructed to do so. Some repairs were effected to broken wire screens around the beef stalls. Both places require thorough repainting and the old rusted iron hooks that so easily accumulate flies deposits and particles of old beef should be replaced by nickel ones that facilitate easy cleaning.

All butchers, vendors and assistants of meat of both Slaughter House and Market are medically certified, and in the market clean aprons are worn by butchers, but in the Slaughter House this is exempted although butchers' clothes are not always clean. This defect will be remedied when regulations are made to cover it. The market is provided with latrines and a urinal, and these are kept in a sanitary condition but there is a necessity for a latrine at the Slaughter House.

Cold Storage:

The cold storage is kept in a sanitary condition and is visited weekly by an Inspector. It was found necessary to condemn the following:—

124 lbs. Beef

7 lbs. Fresh Fish

This condemnation was found necessary on the ground that putrefaction had started, apparently before the articles were put in storage.

Other Food Seizures:

Other food seizures and condemnations were made as given below, being unfit for human consumption and certificates issued to this effect to whom these articles belonged.

On occasions it found that on arrival 75% or more of a case of Cooked Ham was blown and had to be destroyed. Fortunately for the firm they are able to get refunds for bad stuff on the certificates issued by this Department. The Firm has been in communication with the Cannery of these hams and the Proprietors are endeavouring to have this defect remedied.

- 200 lbs. Fat Pork—Infested with worms.
- 313 lbs. Lunch Sausages—Rotted.
- 20 lbs. Smoked Sausages—Rotted.
- 6 lbs. Sausages—Rotted.
- 1644 lbs. Cooked Hams—Tins Blown.
- 11½ lbs. Hams—Decaying.
- 17 lbs. Pigs' Feet—Decaying.
- 300 lbs. Salt Beef—Decaying and worms.
- 420 lbs. Dates—Rotting.
- 30 lbs. Skimmed Cheese—Worms.
- 30 lbs. Cheese—Worms.

Public Sea Baths:

All four baths continued to be used and are kept in a sanitary condition. Because of the distance from the town and the absence of protection to the baths for men on the College Road, injury is done to these by theft in that the partitions and parts of the bridge leading to them have been taken away. The road leading to them requires attention, that is re-modelling and bushing.

Cutting and Clearing of Bush:

There has been much noticeable improvement in the keeping down of overgrown grass along streets and efforts to remove rank vegetation on private lots within the boundaries of the town have so far been satisfactory. Every effort will be made in future to prevent this item of work getting out of control.

Re-erection of Vats:

Work was carried out on the Government Reservoirs by the Public Works Department by dismantling and re-erecting them and all are now in good condition. Several private individuals also repaired their vats.

Scavenging:

Scavenging of the town is carried out as in the past and four mule drawn carts and one covered truck are occupied in the removal of household refuse to the dumps. Grass and tree cuttings are also removed but this not within the meaning of refuse. The scavenging of the town is considered fair. Two labourers are daily employed in spreading rubbish on the dumps and both dumps are in fair condition.

Water Supply:

The water supply of the town is stored in tanks and vats and some persons use barrels and drums for collecting water during rain. It seems reasonable to state that the present supply is adequate during a year of medium rainfall. Distribution of water to the public was made from public tanks during the year, but there was always plenty in stock.

Canals:

The North and South side Canals take away the major portion of excreta of this township. The North side canal requires sinking to remove accumulated silt and to allow free flow of water at low tide.

Latrines:

Efforts were started during the year on improving sanitation by erecting sanitary fly-proofed accommodation, and the following latrines were completed:—

Septic Tanks	5
Pit latrines	2
Bucket latrines	9
Urinals	1

The erection of septic tanks continues to be popular among the people who can afford to erect them. Absorbtion pits give much trouble by overflowing and another system has been introduced and is a distinct improvement over the old one which merely

meant the digging of a hole and the dumping of broken stones or conch shells into it.

Two pit latrines were erected and continue to give entire satisfaction which erases the belief that this system could not be used in this town. In addition this system has certain advantages over water closets or the bucket type latrines when properly erected, fly-proofed and given equal care as that of a septic tank. No water is required for flushing a pit latrine as in the case of a septic tank and not very many homes in this town are sufficiently provided with water that would allow for the provision of septic tanks.

Although provision is made in the building laws whereby persons effecting repairs or erecting new buildings should provide latrines, only nine premises were provided with the bucket type in accordance with what is termed satisfactory, being fly-proofed. All these persons express satisfaction and are in agreement that it is an advance and on correct lines. Dysentery and other intestinal diseases can only be stamped out or kept within control when sanitation in this respect is improved. The King Street latrine was closed to the public because of continual choking and bad smells emitting from it due to the canal water being used for flushing. Seven new latrines were erected over the canals bringing the total of public latrines in use at present up to twenty.

Leave:

Leave of absence through illness had to be granted to Sanitary Inspector Campbell for a period of three months, and Mr. H. A. Flowers, an ex-Sanitary Inspector, was employed to carry on the duties of Mr. Campbell. Sanitary Inspector Baber obtained leave in September for a period of one month, and a similar period was granted to Sanitary Inspector Cervantes in November. Granting of leave to Officers was made possible as there was an officer to be spared as mentioned in a previous paragraph.

General:

With the close of the year, the change of the Department from the Town Board to Government Control takes place, and it is the earnest wish that everything will continue to go on with the least friction possible. The enlisting of the co-operation of the Town Board, its Officers and the public should ensure success in advancing and improving sanitation in the Colony. The object of notices written or verbal is in respect of prevention of diseases and promoting better health among the people, and the Department will only resort to legal proceedings as a remedy when all normal persuasion has been tried and failed. As a public Department it must be borne in mind that the community comes first.

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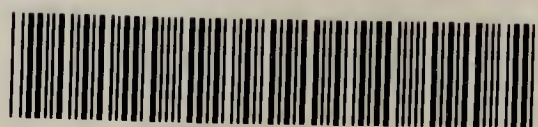


**BRITISH HONDURAS
ANNUAL MEDICAL AND SANITARY REPORT
FOR THE YEAR ENDING
31ST DECEMBER, 1938.**

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PART II.

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British Honduras.

Medical Department,

Belize, 28th August, 1939.

Sir,

I have the honour to submit for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State, the Medical Report of the Health (Part II) of the Colony of British Honduras for the year 1938.

I have the honour to be,

Sir,

Your obedient servant,

R. L. CHEVERTON,

Senior Medical Officer.

The Honourable,
The Colonial Secretary.

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1938

BELIZE HOSPITAL.

Return of Diseases and Deaths for the Year 1938.

BELIZE HOSPITAL.

Return of Diseases and Deaths for the Year 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
1. Infectious and Parasitic Diseases.			
4. Relapsing fever	3	—	—
9. Whooping cough	4	—	69
10. Diphtheria	3	1	—
11. Influenza	1	—	541
11a:1. With pneumonic complications ..	—	—	41
11b:1. With non-respiratory complications	1	—	—
11b:2. Without stated complications ..	3	—	—
13. Dysentery	—	—	—
13a. Amoebic	19	1	20
13b. Bacillary	1	—	—
13c. Other or unspecified	13	4	20
15. Erysipelas	2	—	—
21. Rabies	2	2	—
22. Tetanus	4	1	—
23. Tuberculosis of the respiratory system ..	—	—	1
Pulmonary tuberculosis	12	2	5
24. Tuberculosis of the central nervous system ..	2	2	—
25. Tuberculosis of intestines and peritoneum ..	1	—	—
27. Tuberculosis of other bones and joints ..	8	—	4
28. Tuberculosis of skin and subcutaneous tissues	1	—	—
29. Tuberculosis of lymphatic system (abdominal and bronchial glands excepted)	1	—	—
30. Tuberculosis of genito-urinary system ..	1	—	—
32. Disseminated tuberculosis	—	—	—
32b. Chronic	1	1	—
33. Leprosy	—	—	1
34. Syphilis	—	—	—
34a. Congenital syphilis	1	1	5
34b, c. Syphilis acquired or unspecified ..	28	—	158
Primary syphilis	3	—	3
Secondary syphilis	1	—	3
Tertiary syphilis	5	2	1
35. Other venereal diseases	—	—	—
35:1. Gonorrhoeal or purulent ophthalmia	4	—	1
Ophthalmia	3	—	—
35:2. Other diseases included under 35 ..	8	—	18
Gonorrhoeal Arthritis	9	—	7
Gonorrhoeal Epididymitis	7	—	3
Bubo or soft chancre	1	—	12
Gonorrhoea	7	—	54
Inguinal bubo	8	—	15
Simple chancre	3	—	15
Urethritis	—	—	1
Vaginitis	3	—	3
36. Purulent infection, Septicaemia	1	—	1
36a. Septicaemia	2	1	—
36b. Pyaemia	—	—	—
Pyaemic abscess (any site)	—	—	12
38. Malaria	273	1	1,836
Benign tertian	2	—	—
Cerebral Malaria	13	3	—
Intermittent fever	1	—	—
Malarial cachexia	11	2	16
Malignant tertian	2	1	—
Quotidian Malaria	3	1	—
39. Other diseases due to protozoa	2	—	—
Leishmaniasis	4	—	1
40. Ankylostomiasis	3	—	1
42. Other diseases due to helminths	3	—	1,016
Ascaris lumbricoides	16	—	—
Helminthiasis	3	—	—
Myiasis	1	—	1
Oxyuris vermicularis	—	—	15

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DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
43. Mycoses	—	—	—
43:2. Other mycoses	—	—	12
Mycosis fungoides	—	—	2
Oidium albicans	—	—	1
Ringworm	—	—	34
Thrush	—	—	3
44. Other infectious or parasitic diseases ..	—	—	—
44:1. Vaccinia	1	—	—
44:2. Other sequelae of vaccination ..	1	—	1
44:4. Varicella	—	—	2
44:5. Mumps	3	—	120
44:6. Other diseases included under 44 ..	—	—	16
Blackwater fever	4	—	—
II. Cancer and Other Tumors.			
45. Cancer of the buccal cavity and pharynx ..	—	—	1
46. Cancer of the digestive organs and peritoneum	9	3	1
48. Cancer of the uterus	5	1	2
49. Cancer of other female genital organs ..	2	1	2
50. Cancer of the breast	3	—	3
51. Cancer of the male genito-urinary organs ..	2	—	1
53. Cancer of other or unspecified organs ..	—	—	5
54. Non-malignant tumours	2	—	1
Adenofibroma	1	—	—
Fibroid	2	—	4
Granuloma	—	—	2
Fipoma	1	—	1
Papilloma	—	—	2
Polypus	—	—	1
Recklinghausen's disease	1	—	—
54a. Female genital organs	1	—	—
Fallopian tube	—	—	—
Fibro myomia of Uterus	10	—	7
Uterus	2	1	3
III. Rheumatism, Diseases of Nutrition and of Endocrine Glands and other General Diseases.			
56. Rheumatic fever	2	—	1
Acute articular rheumatism	—	—	1
Sub-acute rheumatic arthritis	—	—	2
57. Chronic rheumatism, Osteo-arthritis	—	—	3
57:1. Chronic rheumatism	—	—	12
Fibrositis	4	—	27
Myofibrositis	—	—	1
57:2. Rheumatoid arthritis, Osteo-arthritis	6	—	22
59. Diabetes	—	—	—
Diabetes mellitus	7	1	3
60. Scurvy	—	—	2
62. Pellagra	2	2	1
63. Rickets	—	—	—
63:1. Rickets	—	—	1
63:2. Spinal curvature of undetermined nature	—	—	2
65. Diseases of the pituitary gland	—	—	—
65:2. Other diseases of the pituitary gland	—	—	1

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DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
66. Diseases of the thyroid and parathyroid glands	1	—	16
66a. Simple goitre	2	—	14
66b. Exophthalmic goitre	—	—	2
66c. Myxoedema, Cretinism	2	—	1
69. Other general diseases	—	—	—
69:1. Amyloid diseases of unstated origin	—	—	—
69:2. Other diseases included under 69 ..	1	—	—
Obesity	—	—	1
IV. Diseases of the Blood and Blood-forming Organs.			
70. Haemorrhagic conditions			
70b. Haemophilia	1	1	—
71. Anaemia, Chlorosis	1	1	10
71a. Pernicious anaemia	2	1	—
71b. Other anaemias and chlorosis ..	13	—	136
71b:1. Splenic anaemia	2	—	—
71b:2. Other diseases included under 71 b	1	—	—
72. Leukaemia, Aleukaemia	—	—	—
72b. Aleukaemia (Lymphadenoma) ..	2	—	1
73. Diseases of the Spleen	—	—	—
73:2. Other diseases of the Spleen ..	—	—	2
Splénomegaly	1	—	7
V. Chronic Poisoning.			
75. Alcoholism (acute or chronic)			
Acute alcoholism	2	—	—
77. Chronic poisoning by mineral substances ..	—	—	—
77:2. Other chronic poisoning by mineral substances	—	—	—
Arsenical dermatitis	2	—	—
Kerosene Poisoning	1	—	—
Lye Poisoning	3	—	—
VI. Diseases of the Nervous System and Sense Organs.			
78. Encephalitis	—	—	—
78b. Other diseases included under 78 ..	—	—	1
79. Meningitis	3	2	—
80. Tabes dorsalis (Locomotor ataxy)	1	—	1
81. Other diseases of the spinal cord	—	—	—
81:1. Progressive muscular atrophy ..	—	—	1
81:4. Other diseases included under 81 ..	2	—	3
82. Cerebral haemorrhage, Apoplexy, etc. ..	—	—	—
82a. Cerebral haemorrhage	1	—	—
82b. Cerebral embolism and thrombosis ..	2	—	1
82c. Hemiplegia and other paralysees of unstated origin	—	—	—
82c:1. Hemiplegia	4	1	3
82c:2. Other paralysees of unstated origin ..	1	—	1
Bell's paralysis	—	—	1
84. Other forms of insanity	—	—	—
84a. Dementia praecox	—	—	3
84b. Other conditions included under 84 ..	—	—	2
Climateric dementia	1	—	—
Melancholia	1	—	—
Psychosis	4	—	3
85. Epilepsy	—	—	5
Epilepsy major	—	—	1
87. Other diseases of the nervous system ..	—	—	15
87b. Neuritis, Neuralgia	2	—	14
87d. Disseminated sclerosis	2	—	1
87e. Other diseases included under 87 ..	—	—	11
Hysteria	5	—	2
Mongolism	1	—	—
Neurosis	2	—	4

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Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
88. Diseases of the eye and annexa	4	—	15
Blepharitis	—	—	5
Cataract (all forms)	5	—	12
Chalazion	—	—	1
Conjunctivitis	5	—	40
Hordeolum	—	—	1
Iridochoroiditis	—	—	2
Interstitial keratitis	1	—	2
Myobomian Cyst	1	—	3
Occlusion of Lachrymal Duct	—	—	1
Phlyctenular keratitis	—	—	1
Photophobia	—	—	1
Pterygium	2	—	6
Sympathetic ophthalmia	2	—	—
Ulcer of cornea	4	—	7
89. Diseases of the ear and of the mastoid sinus	1	—	2
89a. Otitis and other diseases of the ear ..	2	—	8
Otitis externa	1	—	3
Otitis interna	—	—	2
Otitis media	4	—	50
89b. Diseases of the mastoid sinus ..	1	—	—
VII. Diseases of the Circulatory System.			
91. Acute endocarditis	1	1	—
92. Chronic endocarditis, Valvular disease ..	—	—	—
92:1. Aortic valve disease	1	—	1
92:2. Mitral valve disease	1	—	3
92:4. Endocarditis not returned as acute or chronic	1	1	—
92:5. Other or unspecified valve disease	2	—	1
93. Diseases of the myocardium	—	—	—
93a. Acute myocarditis	2	1	2
93b. Myocardial degeneration	6	2	8
93b:3. Other diseases included under 93b ..	2	—	1
95. Other diseases of the heart	—	—	—
95a. Disordered action of heart	3	—	4
95b. Other diseases included under 95 ..	1	—	—
95b:2. Heart disease (undefined)	4	—	3
96. Aneurysm	—	—	2
97. Arterio-sclerosis	—	—	—
97:3. Arterio-sclerosis without record of cerebral vascular lesion	—	—	1
98. Gangrene	—	—	—
98b. Other gangrene	3	2	—
90. Other diseases of the arteries	—	—	5
100. Diseases of the veins (varix, haemorrhoids, phlebitis, etc.)	—	—	—
100:1. Varix	1	—	3
100:2. Other diseases of the veins	4	—	19
101. Diseases of the lymphatic system lymphangi- tis, etc)	19	—	33
102. Abnormalities of blood pressure	—	—	—
Hyperpiesis	—	—	7
103. Other disease of the circulatory system ..	—	—	—
Epistaxis	—	—	8
Secondary haemorrhage	3	1	—
VIII. Diseases of the Respiratory System.			
104. Diseases of nasal fossae and annexa	—	—	2
104:1. Diseases of the nose	—	—	259
104:2. Diseases of the accessory nasal sinuses	4	—	11
105. Diseases of the larynx	—	—	—
105:1. Laryngismus stridulus	1	—	1
105:2. Laryngitis	—	—	4
105:3. Other diseases of the larynx	—	—	—

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DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
106. Bronchitis	16	1	524
106a. Acute bronchitis	—	—	4
106b. Chronic bronchitis	11	—	8
107. Broncho-pneumonia	19	6	1
108. Lobar pneumonia	10	5	—
109. Pneumonia	21	7	4
110. Pleurisy	—	—	—
110:1. Empyema	1	—	—
110:2. Other pleurisy	3	—	5
111. Congestion and haemorrhagic infarct of lung etc.	—	—	—
111:1. Hypostatic congestion lungs	1	—	—
112. Asthma	5	—	43
113. Pulmonary emphysema	—	—	1
114. Other diseases of the respiratory system	—	—	—
114b:2. Other diseases included under 114b.	1	—	2
IX. Diseases of the Digestive System.			
115. Diseases of the buccal cavity, pharynx, etc.	—	—	7
115:1. Diseases of the teeth and gums	3	—	7
Alveolar abscess	3	—	14
Dental caries	—	—	60
Gingivitis	—	—	8
Pyorrhoea alveolaris	3	—	5
Septic mouth	—	—	2
115:3. Diseases of the tonsils	1	—	28
Adenoids	—	—	1
Enlargement of the tonsils	15	—	21
Follicular tonsillitis	2	—	30
Quinsy	3	—	2
115:4. Other diseases included under 115	—	—	14
Leucoplakia	—	—	4
Naso-pharyngeal catarrh	—	—	7
Retro-pharyngeal abscess	1	—	—
Thyroglossal Cyst	1	—	1
Vincent's angina	—	—	1
116. Diseases of the Oesophagus	—	—	1
Stricture of oesophagus	1	—	—
117. Ulcers of the stomach or duodenum	—	—	—
117a. Ulcer of the stomach	1	—	4
117b. Ulcers of the duodenum	1	—	—
118. Other diseases of the stomach	—	—	—
118:1. Inflammation of the stomach	—	—	63
118:2. Other diseases included under 118	—	—	32
Dyspepsia (age 2 and over)	—	—	29
119 & 120. Diarrhoea and enteritis	—	—	—
119 & 120a. Diarrhoea and enteritis	1	—	1
119 & 120a:1. Colitis	1	—	—
119 & 120a:2. Other diarrhoea and enteritis	10	1	2
Diarrhoea	6	1	85
Diarrhoea due to food	1	—	—
Enteritis	1	2	—
Infantile diarrhoea. (Under 2 years)	—	—	3
Infantile enteritis. (Under 2 years)	2	—	—
Pica	—	—	3
121. Appendicitis	30	—	8
122. Hernia, Intestinal Obstruction	1	—	—
122a. Hernia	—	—	—
Congenital hernia (unqualified)	1	—	—
Direct inguinal hernia	2	—	1
Femoral hernia	4	—	2

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DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Casse
Inguinal hernia	30	1	29
Richter's hernia	1	1	—
Umbilical hernia	—	—	2
Ventral hernia	—	—	3
122a : 1. Strangulated hernia	2	—	—
122b. Intestinal obstruction	2	—	2
123. Other diseases of the intestines	—	—	1
123:1. Constipation, Intestinal stasis	23	—	180
123:3. Other diseases included under 123	1	—	5
Fissure of anus	3	—	—
Fistula in ano	5	—	1
Ischio-rectal abscess	5	—	4
Procidentia Recti	1	—	3
Proctitis	2	—	1
Stricture of anus	—	—	2
Stricture of rectum	2	—	1
124. Cirrhosis of the liver	1	1	—
125. Other diseases of the liver	—	—	—
125:2. Other diseases included under 125	—	—	12
Acute hepexatitis	1	—	—
Amoebic abscess of liver	2	1	2
Hepatitis	2	—	18
126. Biliary calculi	—	—	1
127. Other diseases of the gall bladder and ducts	1	—	—
127:1. Cholecystitis without record of			
biliary calculi	3	—	7
127:2. Other diseases included under 127	—	—	4
128. Diseases of the pancreas	—	—	1
129. Peritonitis without stated cause	1	—	—
X. Non-Venereal Diseases of the Genito-Urinary System and Annexa.			
130. Acute nephritis	1	—	—
131. Chronic nephritis	—	—	8
132. Nephritis not stated to be acute or chronic	12	2	8
133. Other diseases of the kidney and annexa	—	—	—
133a. Pyelitis	9	—	44
Uraemia	4	4	—
133b. Other diseases included under 133	6	—	3
134. Calculi of the urinary passages	—	—	1
134a. Calculi of kidney and ureter	—	—	1
134b. Calculi of the bladder	1	—	—
135. Diseases of the bladder	—	—	—
135a. Cystitis	13	—	124
135b. Other diseases of the bladder	1	—	9
136. Diseases of the urethra, urinary abscess, etc.	—	—	—
136a. Stricture of the urethra	10	—	2
136b. Other diseases of the urethra, etc.	4	1	—
Extravasation of urine	3	1	—
Perineal abscess	8	—	4
Urinary fistula	1	—	—
137. Disease of the prostate	—	—	1
Adenoma of prostate	1	1	1
Inflammation of prostate	3	—	—
138. Diseases of the male genital organs	—	—	6
Circumcision (not ritual)	—	—	1
Hydrocele	3	—	3
Orchitis	1	—	2
Paraphimosis	5	—	5
Phimosis	17	1	13

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DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
139. Diseases of the female genital organs	—	—	—
139a. Diseases of the ovary	—	—	—
Fallopian tube and parametrium	3	—	3
139a:1. Diseases of the ovary	5	—	3
139a:2. Diseases of the Fallopian tube	19	2	19
139a:3. Diseases of the parametrium	5	—	2
139b. Diseases of the uterus	4	1	6
Amenorrhoea	—	—	88
Cervicitis	1	—	33
Dysmenorrhoea	2	—	24
Endometritis	2	—	3
Leucorrhoea	—	—	26
Menopause	1	—	27
Menorrhagia	1	—	2
Metrorrhagia	5	—	15
Prolapse of uterus	—	—	3
Retroflexion of uterus	—	—	1
Retroversion of uterus	7	—	8
139c. Diseases of the breast	—	—	2
Mammary abscess	6	—	3
Mastitis	1	—	9
139d. Other diseases of the female genital organs	1	—	7
Abscess of Bartholin's gland	3	—	2
Salpingitis	—	—	1
Vulvitis	—	—	1
XI. Diseases of Pregnancy, Childbirth and the Puerperal State.			
141. Abortion not returned as septic	7	—	5
141:1. Haemorrhage following abortion	1	—	—
141:2. Without record of haemorrhage	7	—	—
142. Ectopic gestation	3	—	—
143. Other accidents of pregnancy	25	—	33
Anaemia of pregnancy	12	2	—
144. Puerperal haemorrhage	—	—	—
144a. Placenta praevia	1	—	—
146. Puerperal albuminuria and convulsions	—	—	—
146:2. Other diseases included under 146	—	—	—
Albuminuria of pregnancy	2	1	—
Pyelitis of pregnancy	3	—	3
147. Other toxaeemias of pregnancy	—	—	—
Pernicious vomiting (females 15-45)	5	—	3
149. Other accidents of childbirth	3	1	—
Retained Placenta	2	—	—
Torn Perineum	1	—	—
150. Other or unspecified conditions of the puer- peral state	—	—	—
150:1. Puerperal insanity	1	1	1
150:3. Childbirth (unqualified)	186	—	1
XII. Diseases of the Skin and Cellular Tissue.			
151. Carbuncle, boil	2	—	7
152. Cellulitis, acute abscess	—	—	—
152:1. Cellulitis	36	—	27
152:2. Acute abscess	20	—	57
153. Other diseases of the skin and its annexa	2	—	17
Acne Vulgaris	—	—	4
Corns	—	—	1
Dermatitis	1	—	24
Eczema	3	—	16
Erythema nodosum	—	—	3
Herpes	1	—	6

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DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
Ichthyosis	I	—	—
Impetigo contagiosa	4	—	104
Ingrowing toe-nail	4	—	2
Keloid	4	—	—
Pemphigus	I	—	I
Psoriasis	—	—	2
Pyodermia	—	—	9
Scabies	—	—	30
Ulcer (unqualified)	6	—	22
Urticaria	—	—	6
Verruca	—	—	I
XIII. Diseases of the Bones and Organs of Locomotion.			
154. Acute infective osteomyelitis and periostitis	3	—	2
155. Other diseases of the bones	—	—	5
Ostitis	I	—	I
Periostitis	—	—	I
Fractures	28	2	6
156. Diseases of the joints and other organs of locomotion	—	—	—
156a. Diseases of the joints	4	—	14
156b. Diseases of other organs of locomotion	4	—	14
Bursitis	—	—	I
Ganglion	I	—	—
Halux valgus	—	—	I
Pes planus	—	—	I
Talipes equino-valgus	2	—	—
Torticollis	—	—	I
XIV. Congenital Malformations.			
157. Congenital malformations.			
157a. Congenital hydrocephalus.	—	—	2
157b. Spina bifida and Meningocele	I	—	—
157c. Other congenital malformations ..	I	I	I
157c:2. Cleft palate, harelip	—	—	2
157c:4. Other stated congenital malformations	I	—	I
Naevus	I	—	I
XV. Diseases of Early Infancy.			
158. Congenital debility	I	I	—
Marasmus	18	2	13
159. Premature birth	9	5	—
161. Other diseases peculiar to early infancy ..	I	—	40
161a. Atelectasis	I	I	—
161b. Icterus neonatorum	—	—	I
161c:1. Diseases of the umbilicus	—	—	I
XVI. Old Age.			
162. Old age	—	—	—
162a. Senile dementia	—	—	3
162b. Other forms of senile decay	5	—	11
XVII. Deaths from Violence.			
163. Suicide by solid or liquid poisons and corrosive substances.	—	—	—
174. Homicide by cutting or piercing instruments	—	—	I
176. Attack by venomous animals	—	—	—
Insect bite	—	—	8
177. Food poisoning	—	—	I

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DISEASES	IN PATIENTS		OUT PATIENTS
	Admission	Deaths	New Cases
179. Other acute accidental poisoning (not by gas)	2	—	1
180. Conflagration	—	—	5
181. Accidental burns (conflagration excepted) ..	2	—	2
185. Accidental injury by cutting or piercing instruments	21	1	64
186. Accidental injury by fall, crushing, etc. ..	45	—	24
188. Injury by animals (poisoning by venomous animals excepted)	1	—	121
193. Electricity (lightning excepted)	—	—	6
194. Other and unstated forms of accidental violence	1	—	1
194:2. Other causes included under 194 ..	16	—	35
XVIII. Ill-Defined Diseases.			
200. Cause of death unstated or ill-defined ..	—	—	—
Ascites	—	—	1
Avitaminosis	—	—	1
Debility	2	—	9
Hyperpyrexia	—	—	4
Insomnia	—	—	2
Malnutrition	—	—	5
Oedema	—	—	1
Serum Sickness	1	—	—
Shock	9	1	—
Illness unstated or ill-defined	2	—	9
Total	1746	106	7,534

DISTRICTS.

(a) Districts.

(a) Total number of cases seen (In-Patients, Out-Patients and District Patients) during the period April—December, 1938.

(b) District Hospitals.

(b) Returns of Diseases and Deaths (In-Patients) for the period April—December, 1938.

DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES						COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
I. Infectious and Parasitic Diseases.										
6.	Small Pox	..	..	..	..	—	—	—	1	—
9.	Whooping cough	..	..	..	..	—	—	—	5	2
11.	Influenza	..	..	..	..	—	—	—	—	—
	11a:1. With pneumonic complications	..	..	..	..	—	123	1	—	—
	11a:2. With other respiratory complications	..	..	..	..	—	148	5	—	—
	11b:1. With non-respiratory complications	..	..	..	..	—	50	5	—	—
	11b:2. Without stated complications	..	..	..	..	—	103	9	—	51
13.	Dysentery	..	..	..	..	—	—	—	—	—
	13a. Amoebic	..	..	..	..	59	33	15	22	—
	13b. Bacillary	..	..	..	..	6	2	2	1	—
	13c. Other or unspecified	..	..	..	..	17	—	—	2	6
15.	Erysipelas	..	..	..	..	—	—	—	3	—
23.	Tuberculosis of the respiratory system	..	..	..	..	—	—	—	—	—
	Pulmonary tuberculosis	..	..	..	..	6	13	8	15	8
	Tuberculous laryngitis	..	..	..	..	—	—	—	1	—
	Tuberculous pleurisy	..	..	..	..	—	—	—	1	—
25.	Tuberculosis of intestines and peritoneum	..	..	..	..	—	1	—	—	—
	Abdominal tuberculosis	..	..	..	..	—	3	—	—	—
27.	Tuberculosis of other bones and joints	..	..	..	..	—	1	—	—	—
34.	Syphilis	..	..	..	..	—	—	—	—	—
	34a. Congenital syphilis	..	..	..	..	—	13	2	3	—
	34b, c. Syphilis acquired or unspecified	..	..	..	..	1	4	—	6	24
	Primary syphilis	..	..	..	..	6	21	—	14	1
	Secondary syphilis	..	..	..	..	2	11	1	20	—
	Tertiary syphilis	..	..	..	..	—	56	5	8	2
35.	Other venereal diseases	..	..	..	..	—	—	—	—	3
	35:1. Gonorrhoeal or purulent ophthalmia	..	..	..	..	2	12	3	—	—
	Ophthalmia	..	..	..	..	3	1	—	—	—
	35:2. Other diseases included under 35	..	..	..	..	—	—	7	—	45
	Balanitis	..	..	..	..	—	2	—	4	—
	Bubo or soft chancre	..	..	..	..	5	28	—	2	—
	Gonorrhoea	..	..	..	..	17	96	8	85	82
	Arthritis	..	..	..	..	—	—	—	1	—
	Epididymitis	..	..	..	..	—	—	—	1	—
	Prostatitis	..	..	..	..	—	—	—	2	—
	Salpingitis	..	..	..	..	—	—	—	4	1
	Inguinal bubo	..	..	..	..	4	7	3	29	—
	Simple chancre	..	..	..	..	—	3	2	2	—
	Vaginitis	..	..	..	..	—	46	—	—	—
36.	Purulent infection, Septicaemia	..	..	..	..	—	—	—	—	—
	36a. Septicaemia	..	..	..	..	—	—	—	—	—
	36b. Pyaemia	..	..	..	..	—	—	—	—	—
	Staphylococcus infection	..	..	..	..	—	3	—	—	—

**The figures for Toledo cover only the period May–December, 1938.

DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
I. Infectious and Parasitic Diseases.										
6. Small Pox	—	—	—	—	—	—	—	—	—	—
9. Whooping cough	—	—	—	—	—	—	—	—	—	2
11. Influenza	—	—	—	—	—	—	—	—	—	—
11a:1. With pneumonic complications	—	8	—	—	—	—	—	—	—	—
11a:2. With other respiratory complications	—	1	—	1	—	—	—	—	—	—
11b:1. With non-respiratory complications	—	—	—	—	—	—	—	—	—	—
11b:2. Without stated complications	—	—	—	—	1	—	—	—	—	1
13. Dysentery	—	—	—	—	—	—	—	—	—	—
13a. Amoebic	21	2	12	—	2	—	18	1	—	—
13b. Bacillary	1	—	2	1	—	—	1	—	—	—
13c. Other or unspecified	—	—	—	—	—	—	1	—	3	1
15. Erysipelas	—	—	1	—	—	—	2	—	—	—
23. Tuberculosis of the respiratory system	—	—	—	—	—	—	—	—	—	—
Pulmonary tuberculosis	2	—	2	—	1	—	6	1	2	—
Tuberculous laryngitis	—	—	—	—	—	—	1	—	—	—
Tuberculous pleurisy	—	—	—	—	—	—	1	—	—	—
25. Tuberculosis of intestines and peritoneum	—	—	1	1	—	—	—	—	—	—
Abdominal Tuberculosis	—	—	—	—	—	—	—	—	—	—
27. Tuberculosis of other bones and joints	—	—	—	—	—	—	—	—	—	—
34. Syphilis	—	—	—	—	—	—	3	—	—	—
34a. Congenital syphilis	—	—	—	—	—	—	—	—	—	—
34b, c. Syphilis acquired or unspecified	—	—	—	—	—	—	—	—	2	—
Primary syphilis	3	—	1	—	—	—	1	—	1	—
Secondary syphilis	—	—	—	—	1	—	5	—	—	—
Tertiary syphilis	1	—	—	—	—	—	3	—	—	—
35. Other venereal diseases	—	—	—	—	—	—	—	—	—	—
35:1. Gonorrhoeal or purulent ophthalmia	—	—	—	—	—	—	—	—	—	—
Ophthalmia	—	—	—	—	—	—	—	—	—	—
35:2. Other diseases included under 35	—	—	—	—	1	—	—	—	—	—
Balanitis	—	—	—	—	—	—	1	—	—	—
Bubo or soft chancre	1	—	—	—	—	—	1	—	—	—
Gonorrhoea	3	—	1	—	—	—	12	—	5	—
Gonorrhoeal Arthritis	—	—	—	—	—	—	1	—	—	—
Epididymitis	—	—	—	—	—	—	—	2	—	—
Prostatitis	—	—	—	—	—	—	1	—	—	—
Salpingitis	—	—	—	—	—	—	2	—	—	—
Inguinal bubo	1	—	1	—	1	—	7	—	—	—
Simple chancre	—	—	—	—	—	—	—	—	—	—
Vaginitis	—	—	—	—	—	—	—	—	—	—
36. Purulent infection, Septicaemia	—	—	—	—	—	—	—	—	1	—
36a. Septicaemia	—	—	—	—	—	—	—	—	—	—
36b. Pyaemia	—	—	—	—	—	—	—	—	—	—
Staphylococcus infection	—	—	—	—	—	—	—	—	—	—

**The figures for Toledo cover only the period May–December, 1938.

DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES						COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
38.	Malaria	..	..	..	..	365	—	27	1,160	195
	Benign tertian	..	..	..	..	4	201	177	—	1
	Cerebral Malaria	..	..	..	..	—	—	—	—	2
	Intermittent fever	..	..	..	..	—	—	—	13	—
	Malarial cachexia	..	..	..	..	—	15	30	33	30
	Malarial dysentery	..	..	..	..	—	—	—	30	2
	Malignant tertian	..	..	..	..	7	7	30	12	628
	Quartan malaria	..	..	..	..	—	28	2	—	—
	Quotidian malaria	..	..	..	..	—	294	—	—	—
39.	Other diseases due to protozoa	..	..	..	..	—	—	—	—	—
	Leishmaniasis	..	..	..	..	3	34	1	10	37
40.	Ankylostomiasis	..	..	..	..	24	135	23	23	111
42.	Other diseases due to helminths	..	..	..	..	—	—	2	6	—
	Ascaris lumbricoides	..	..	..	..	36	239	24	10	19
	Myiasis	..	..	..	..	—	—	—	4	—
	Nematodes (not ankylostoma)	..	..	..	..	5	—	—	—	—
	Oxyuris vermicularis	..	..	..	..	—	25	1	—	—
	Taenia solium	..	..	..	..	1	5	—	—	—
	Worm colic	..	..	..	..	—	4	—	—	—
43.	Mycoses	..	..	..	..	—	—	—	—	2
	43:2. Other mycoses	..	..	..	..	—	—	—	—	—
	Apthous stomatitis	..	..	..	..	—	17	—	1	2
	Ringworm	..	..	..	..	4	77	2	2	3
	Sprue	..	..	..	..	—	—	—	—	—
	Thrush	..	..	..	..	—	7	—	—	3
44.	Other infectious or parasitic diseases	..	..	..	..	—	—	—	1	—
	44:1. Vaccinia	..	..	..	..	—	—	—	—	—
	44:2. Other sequelae of vaccination	..	..	..	..	—	3	—	—	2
	Cellulitis	..	..	..	..	—	—	—	—	—
	Erysipelas	..	..	..	..	—	—	—	1	—
	44:4. Varicella	..	..	..	..	—	—	1	—	—
	44:5. Mumps	..	..	..	..	3	—	6	—	1
	44:6. Other diseases included under 44	..	..	..	..	—	—	—	—	—
	Blackwater fever	..	..	..	..	—	1	—	9	—
II. Cancer and Other Tumors.										
45.	Cancer of the buccal cavity and pharynx	..	..	..	..	—	—	—	—	—
46.	Cancer of the digestive organs and peritoneum	..	..	..	..	3	4	—	—	—
48.	Cancer of the uterus	..	..	..	..	—	1	—	1	—
49.	Cancer of other female genital organs	..	..	..	..	—	—	—	—	—
50.	Cancer of the breast	..	..	..	..	—	—	—	1	—
51.	Cancer of the male genito-urinary organs	..	..	..	..	1	1	—	—	—
52.	Cancer of the skin	..	..	..	..	—	—	—	—	—
	Rodent ulcer (site not stated)	..	..	..	..	—	2	—	—	—
53.	Cancer of other or unspecified organs	..	..	..	..	—	—	—	—	1
54.	Non-malignant tumours	..	..	..	..	—	—	—	—	—
	Adenoma	..	..	..	..	—	7	—	—	—
	Angioma	..	..	..	..	—	1	—	—	—
	Dermoid cyst	..	..	..	..	—	1	—	—	—
	Fibroid	..	..	..	..	5	20	—	—	3
	Granuloma	..	..	..	..	—	1	—	—	—

**The figures for Toledo cover only the period May–December, 1938.

DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.*Figures refer to the International List of The Causes of Death (1929 Revised).*

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
38. Malaria	29	—	—	—	3	—	166	4	15	22
Benign tertian	3	—	13	—	13	—	—	—	1	—
Cerebral Malaria	—	—	—	—	—	—	—	—	2	1
Intermittent fever	—	—	—	—	—	—	13	—	—	—
Malarial cachexia	—	—	—	—	—	—	4	—	19	1
Malarial dysentery	—	—	—	—	—	—	21	—	—	—
Malignant tertian	7	3	1	—	6	—	10	2	8	3
Quartan malaria	—	—	—	—	—	—	—	—	2	—
Quotidian malaria	—	—	38	1	—	—	—	—	—	—
39. Other diseases due to protozoa	—	—	—	—	—	—	—	—	—	—
Leishmaniasis	1	—	2	—	1	—	7	—	—	—
40. Ankylostomiasis	10	—	10	—	2	—	5	—	14	—
42. Other diseases due to helminths	—	—	—	—	—	—	—	—	—	—
Ascaris lumbricoides	—	—	—	—	—	—	1	—	17	—
Myiasis	—	—	—	—	—	—	—	—	—	—
Nematodes (not ankylostoma)	—	—	—	—	—	—	—	—	—	—
Oxyuris vermicularis	—	—	—	—	—	—	—	—	—	—
Taenia solium	—	—	—	—	—	—	—	—	—	—
Worm colic	—	—	—	—	—	—	—	—	—	—
43. Mycoses	—	—	—	—	—	—	—	—	—	—
43:2. Other mycoses	—	—	—	—	—	—	—	—	—	—
Apthous stomatitis	—	—	—	—	—	—	—	—	—	—
Ringworm	—	—	—	—	—	—	—	—	—	—
Sprue	—	—	—	—	—	—	—	—	—	—
Thrush	—	—	—	—	—	—	—	—	—	—
44. Other infectious or parasitic diseases	—	—	—	—	—	—	—	—	—	—
44:1. Vaccinia	—	—	—	—	—	—	—	—	—	—
44:2. Other sequelae of vaccination	—	—	—	—	—	—	—	—	—	—
Cellulitis	—	—	—	—	—	—	—	—	2	—
Erysipelas	—	—	—	—	—	—	1	—	—	—
44:4. Varicella	—	—	—	—	—	—	—	—	—	—
44:5. Mumps	—	—	—	—	1	—	—	—	—	—
44:6. Other diseases included under 44	—	—	—	—	—	—	—	—	—	—
Blackwater fever	—	—	—	—	—	—	6	1	—	—
II. Cancer and Other Tumors.										
45. Cancer of the buccal cavity and pharynx	—	—	1	—	—	—	—	—	—	—
46. Cancer of the digestive organs and peritoneum	1	—	1	1	—	—	—	—	—	—
48. Cancer of the uterus	—	—	—	—	—	—	—	—	—	—
49. Cancer of other female genital organs	—	—	—	—	—	—	—	—	1	—
50. Cancer of the breast	—	—	—	—	—	—	—	—	—	—
51. Cancer of the male genito-urinary organs	1	—	—	—	—	—	—	—	—	—
52. Cancer of the skin	—	—	—	—	—	—	—	—	—	—
Rodent ulcer (site not stated)	—	—	—	—	—	—	—	—	—	—
53. Cancer of other or unspecified organs	—	—	—	—	—	—	—	—	1	—
54. Non-malignant tumours	—	—	—	—	—	—	—	—	—	—
Adenoma	—	—	—	—	—	—	—	—	—	—
Angioma	—	—	—	—	—	—	—	—	—	—
Dermoid cyst	—	—	—	—	—	—	—	—	—	—
Fibroid	—	—	—	—	—	—	—	—	1	—
Granuloma	—	—	—	—	—	—	—	—	—	—

**The figures for Toledo cover only the period May–December, 1938.

DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES						COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
Lipoma	..	..	..	..	..	1	2	—	—	—
Odontoma	..	..	..	..	..	—	—	1	—	—
Polypus	..	..	..	..	..	1	14	—	—	—
54a. Female genital organs	..	..	..	..	..	—	—	—	—	—
Ovary	..	..	..	..	..	—	—	2	—	1
Uterus	..	..	..	..	..	—	—	—	—	1
III. Rheumatism, Diseases of Nutrition and of Endocrine Glands and other General Diseases.										
56.	Rheumatic fever	..	..	..	..	—	—	2	—	—
	Acute articular rheumatism	..	..	..	..	—	—	1	—	—
	Acute rheumatic carditis	..	..	..	..	—	—	—	—	2
	Acute rheumatic chorea	..	..	..	..	—	—	1	—	—
	Acute rheumatic endocarditis	..	..	..	..	—	5	1	6	5
	Sub-acute rheumatic arthritis	..	..	..	..	—	—	—	6	3
57.	Chronic rheumatism, Osteo-arthritis	..	..	..	..	—	—	—	6	7
	57:1. Chronic rheumatism	..	..	..	..	—	21	5	20	1
	Fibrositis	..	..	..	..	—	44	—	4	—
	Myofibrositis	..	..	..	..	16	30	59	11	—
	57:2. Rheumatoid arthritis, Osteo-arthritis	..	..	..	..	2	5	6	—	—
58.	Gout	..	..	..	..	—	—	—	1	—
59.	Diabetes	..	..	..	..	—	—	—	—	—
	Diabetes mellitus	..	..	..	..	1	13	1	—	2
	Diabetic gangrene	..	..	..	..	—	—	1	—	—
	Diabetic gangrene	..	..	..	..	—	—	—	—	—
	Hyperglycaemia	..	..	..	..	—	—	—	—	—
	Phrynodermia	..	..	..	..	—	—	—	1	—
60.	Scurvy	..	..	..	..	—	—	—	—	—
	Infantile scurvy	..	..	..	..	—	1	—	—	—
	Scorbutus	..	..	..	..	—	24	—	—	—
62.	Pellagra	..	..	..	..	—	10	1	—	—
63.	Rickets	..	..	..	..	—	—	—	—	4
	63:1. Rickets	..	..	..	..	—	74	—	—	—
	63:2. Spinal curvature of undetermined nature	..	..	..	..	—	—	—	—	—
66.	Diseases of the thyroid and parathyroid glands	..	..	..	..	—	—	—	—	5
	66a. Simple goitre	..	..	..	..	—	11	—	—	1
	66b. Exophthalmic goitre	..	..	..	..	—	3	—	—	—
67.	Diseases of the thymus	..	..	..	..	—	—	—	1	—
68.	Diseases of the adrenals	..	..	..	..	—	—	—	—	—
69.	Other general diseases	..	..	..	..	—	—	—	—	—
	69:1. Amyloid diseases of unstated origin	..	..	..	..	1	—	—	—	—
	69:2. Other diseases included under 69	..	..	..	..	—	—	—	—	—
	Acidosis	..	..	..	..	—	5	—	—	—
	Malnutrition	..	..	..	..	1	—	—	2	—
IV. Diseases of the Blood and Blood-forming Organs.										
70.	Haemorrhagic conditions	1	—	—	1	2

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DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
Lipoma	I									
Odontoma					I					
Polypus										
54a. Female genital organs										
Ovary									I	
Uterus										
III. Rheumatism, Diseases of Nutrition and of Endocrine Glands and other General Diseases. ..										
56. Rheumatic fever										
Acute articular rheumatism										
Acute rheumatic carditis										
Acute rheumatic chorea									I	
Acute rheumatic endocarditis					I					
Sub-acute rheumatic arthritis							I		2	
57. Chronic rheumatism, Osteo-arthritis							2			
57:1. Chronic rheumatism	I		I				4			
Fibrositis			I				I			
Myofibrositis							I			
57:2. Rheumatoid arthritis, Osteo-arthritis										
58. Gout			I	I						
59. Diabetes										
Diabetes mellitus										
Diabetic gangrene										
Hyperglycaemia										
Phrynoderma										
60. Scurvy										
Infantile scurvy										
Scorbutus					I					
62. Pellagra					I					
63. Rickets										
63:1. Rickets										
63:2. Spinal curvature of undetermined nature										
66. Diseases of the thyroid and parathyroid glands										
66a. Simple goitre										
66b. Exophthalmic goitre										
67. Diseases of the thymus										
68. Diseases of the adrenals							I			
69. Other general diseases										
69:1. Amyloid diseases of unstated origin										
69:2. Other diseases included under 69	I									
Malnutrition										
IV. Diseases of the Blood and Blood-forming Organs. ..										
70. Haemorrhagic conditions							I			

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DISTRICTS.

Total number of cases seen. (In-Patients, Out-Patients and District Patients) during the period April–December, 1938

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
71. Anaemia, Chlorosis	—	15	—	5	—
71a. Pernicious anaemia	1	—	—	1	17
71b. Other anaemias and chlorosis ..	17	73	—	8	4
71b:1. Splenic anaemia	—	10	—	—	18
71b:2. Other diseases included under 71b	1	—	—	—	—
73. Diseases of the Spleen	—	—	—	—	—
73:2. Other diseases of the Spleen	—	—	—	—	13
Perisplenitis	—	—	—	1	—
Splenomegaly	—	—	—	—	2
V. Chronic Poisoning.					
75. Alcoholism (acute or chronic)	1	—	—	1	1
Acute alcoholism	—	2	1	1	—
Delirium tremens	—	—	1	—	—
76. Chronic poisoning by other organic substances	—	—	—	—	—
Tobacco habit	—	2	—	—	—
Cannabis Indica Poisoning (ganga)	2	—	—	—	—
VI. Diseases of the Nervous System and Sense Organs.					
78. Encephalitis	—	—	—	—	—
78a. Cerebral abscess	1	—	—	—	1
79. Meningitis	1	—	—	—	—
81. Other diseases of the spinal cord	—	—	—	—	—
81:3. Myelitis of unstated origin	—	1	—	1	—
82. Cerebral haemorrhage, Apoplexy, etc. ..	1	—	—	—	—
82a. Cerebral haemorrhage	1	1	—	—	—
82b. Cerebral embolism and thrombosis ..	—	—	—	—	1
82c. Hemiplegia and other paralyzes of unstated origin	—	—	—	—	—
82c:1. Hemiplegia	1	—	—	4	1
82c:2. Other paralyzes of unstated origin	1	—	—	—	—
Facial paralysis	—	1	—	—	—
84. Other forms of insanity	1	—	—	—	—
84b. Other conditions included under 84 ..	—	—	—	—	—
Confusional insanity	—	1	—	—	—
Insomnia	—	—	—	1	—
Melancholia	—	1	—	—	—
85. Epilepsy	—	—	—	1	—
Epilepsy major	1	1	1	2	3
Epilepsy minor	—	1	—	—	—
86. Infantile convulsions (under 5 years of age)	—	2	—	—	—
87. Other diseases of the nervous system ..	—	—	—	—	3
87a. Chorea	—	2	—	—	—
87b. Neuritis, Neuralgia	18	44	12	11	3
87c. Paralysis agitans	—	3	—	—	—
87d. Disseminated sclerosis	—	—	—	—	—
87e. Other diseases included under 87 ..	—	—	8	3	—
Angioneurotic oedema	—	5	—	—	—
Hiccough	—	—	1	—	—
Neurasthenia	—	—	1	3	—
Fits (aged 5 and over)	—	—	—	1	—
Hysteria	2	23	—	—	1

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DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.*Figures refer to the International List of The Causes of Death (1929 Revised).*

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
	71. Anaemia, Chlorosis									
71a. Pernicious anaemia	I								5	
71b. Other anaemias and chlorosis	I		2				4			
71b:1. Splenic anaemia									4	I
71b:2. Other diseases included under 71b										
73. Diseases of the Spleen										
73:2. Other diseases of the Spleen										
Perisplenitis							I			
Splenomegaly										
V. Chronic Poisoning.										
75. Alcoholism (acute or chronic)			I	I						
Acute alcoholism			I	I			2			
Delirium tremens										
76. Chronic poisoning by other organic substances										
Tobacco habit										
Cannabis Indica Poisoning, (ganga)	2									
VI. Diseases of the Nervous System and Sense Organs.										
78. Encephalitis										
78a. Cerebral abscess	I	I							I	I
79. Meningitis	I	I								
81. Other diseases of the spinal cord										
81:3. Myelitis of unstated origin			I							
82. Cerebral haemorrhage, Apoplexy, etc.	I	I								
82a. Cerebral haemorrhage										
82b. Cerebral embolism and thrombosis										
82c. Hemiplegia and other paralyzes of un- stated origin										
82c:1. Hemiplegia	I									
82c:2. Other paralyzes of unstated origin										
Facial paralysis										
84. Other forms of insanity	I									
84b. Other conditions included under 84										
Confusional insanity										
Insomnia										
Melancholia										
85. Epilepsy							I			
Epilepsy major										
Epilepsy minor										
86. Infantile convulsions (under 5 years of age)										
87. Other diseases of the nervous system										
87a. Chorea										
87b. Neuritis, Neuralgia					I					
87c. Paralysis agitans										
87d. Disseminated sclerosis										
87e. Other diseases included under 87					I		2			
Angioneurotic oedema										
Hiccough										
Neurasthenia							I			
Fits (aged 5 and over)										
Hysteria			I							

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DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES		COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
88.	Diseases of the eye and annexa	—	—	1	—	—
	Cataract (all forms)	3	5	—	—	—
	Chalazion	2	2	—	—	1
	Conjunctivitis	4	100	8	7	21
	Foreign Body in Eye	—	—	—	1	—
	Glaucoma	—	2	—	—	1
	Hordeolum	—	2	—	—	—
	Hypopyon	—	3	—	1	2
	Iridochoiritis	1	—	3	1	—
	Interstitial keratitis	—	5	—	—	1
	Myopia	—	—	—	1	—
	Optic neuritis	—	1	—	1	—
	Pterygium	—	5	—	—	1
	Trachoma	—	33	—	2	—
	Ulcer of cornea	—	1	—	3	6
89.	Diseases of the ear and of the mastoid sinus	—	—	1	—	—
	89a. Otitis and other diseases of the ear	—	12	—	1	—
	Otitis externa	—	40	—	14	—
	Otitis media	2	3	6	7	3
	89b. Diseases of the mastoid sinus	1	1	—	—	—
VII. Diseases of the Circulatory System.						
90.	Pericarditis	—	1	—	—	—
91.	Acute endocarditis	—	—	—	—	—
	91:2. Other acute endocarditis	—	8	—	—	—
92.	Chronic endocarditis, Valvular disease	—	—	—	—	—
	92:1. Aortic valve disease	1	8	—	—	—
	92:2. Mitral valve disease	3	23	7	1	—
	92:3. Aortic and mitral valve disease	—	—	1	—	—
	92:4. Endocarditis not returned as acute or chronic	—	17	—	—	—
93.	Diseases of the myocardium	—	—	—	2	—
	93a. Acute myocarditis	—	—	—	3	1
	93b. Myocardial degeneration	2	1	4	5	1
	93b:3. Other diseases included under 93b	—	—	—	—	1
94.	Diseases of the coronary arteries, Angina pectoris	—	—	—	—	1
95.	Other diseases of the heart	—	—	—	—	—
	95a. Disordered action of heart	1	—	—	4	1
	95b. Other diseases included under 95	—	—	2	4	1
	95b:1. Dilatation of heart (cause unspecified)	—	—	—	3	—
96.	Aneurysm	—	—	—	1	—
97.	Arterio-sclerosis	—	—	—	—	4
	97:1. Arterio-sclerosis with cerebral haemorrhage	—	—	1	—	—
	97:3. Arterio-sclerosis without record of cerebral vascular lesion	—	33	2	—	—
98.	Gangrene	—	1	—	—	—
	98b. Other gangrene	—	—	—	2	—
	Cancrum Oris	—	—	—	—	2

**The figures for Toledo cover only the period May–December, 1938.

DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.*Figures refer to the International List of The Causes of Death (1929 Revised).*

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
88. Diseases of the eye and annexa .. .. .	|	|	|	|	|	|	|	|	|	|
Cataract (all forms) .. .. .	|	|	|	|	|	|	|	|	|	|
Chalazion .. .. .	|	|	|	|	|	|	|	|	|	|
Conjunctivitis .. .. .	|	|	|	|	2	|	|	|	1	|
Foreign Body in Eye .. .. .	|	|	|	|	|	|	|	|	|	|
Glaucoma .. .. .	|	|	|	|	|	|	|	|	|	|
Hordeolum .. .. .	|	|	|	|	|	|	|	|	|	|
Hypopyon .. .. .	|	|	|	|	|	|	|	|	|	|
Iridochoroiditis .. .. .	|	|	|	|	1	|	|	|	2	|
Interstitial keratitis .. .. .	|	|	1	|	|	|	|	|	1	|
Myopia .. .. .	|	|	|	|	|	|	|	|	|	|
Optic neuritis .. .. .	|	|	|	|	|	|	1	|	|	|
Pterygium .. .. .	|	|	|	|	|	|	|	|	|	|
Trachoma .. .. .	|	|	1	|	|	|	|	|	|	|
Ulcer of cornea .. .. .	|	|	|	|	|	|	1	|	2	|
89. Diseases of the ear and of the mastoid sinus	|	|	|	|	|	|	|	|	|	|
89a. Otitis and other diseases of the ear	|	|	|	|	|	|	|	|	|	|
Otitis externa .. .. .	|	|	|	|	|	|	|	|	|	|
Otitis media .. .. .	|	|	|	|	|	|	|	|	2	|
89b. Diseases of the mastoid sinus .. .. .	|	|	|	|	|	|	|	|	|	|
VII. Diseases of the Circulatory System.										
90. Pericarditis .. .. .	|	|	|	|	|	|	|	|	|	|
91. Acute endocarditis .. .. .	|	|	|	|	|	|	|	|	|	|
91:2. Other acute endocarditis .. .. .	|	|	|	|	|	|	|	|	|	|
92. Chronic endocarditis, Valvular disease .. .. .	|	|	|	|	|	|	|	|	|	|
92:1. Aortic valve disease .. .. .	|	|	|	|	|	|	|	|	|	|
92:2. Mitral valve disease .. .. .	|	|	1	|	|	|	|	|	|	|
92:3. Aortic and mitral valve disease .. .. .	|	|	|	|	|	|	|	|	|	|
92:4. Endocarditis not returned as acute or chronic .. .. .	|	|	|	|	|	|	|	|	|	|
93. Diseases of the myocardium .. .. .	|	|	|	|	|	|	|	|	|	|
93a. Acute myocarditis .. .. .	|	|	|	|	|	|	1	|	1	1
93b. Myocardial degeneration	1	1	|	|	|	|	2	|	1	|
93b:3. Other diseases included under 93b	|	|	|	|	|	|	1	|	|	|
94. Diseases of the coronary arteries, Angina pectoris .. .. .	|	|	|	|	|	|	|	|	|	|
95. Other diseases of the heart .. .. .	|	|	|	|	|	|	|	|	|	|
95a. Disordered action of heart .. .. .	|	|	|	|	|	|	|	|	|	|
95b. Other diseases included under 95 .. .. .	|	|	|	|	|	|	|	|	|	|
95b:1. Dilatation of heart (cause unspeci- fied) .. .. .	|	|	|	|	|	|	3	|	|	|
96. Aneurysm .. .. .	|	|	|	|	|	|	|	|	|	|
97. Arterio-sclerosis .. .. .	|	|	|	|	|	|	|	|	2	1
97:1. Arterio-sclerosis with cerebral hae- morrhage .. .. .	|	|	|	|	|	|	|	|	|	|
97:3. Arterio-sclerosis without record of cerebral vascular lesion .. .. .	|	|	|	|	|	|	|	|	|	|
98. Gangrene .. .. .	|	|	|	|	|	|	|	|	|	|
98b. Other gangrene .. .. .	|	|	1	|	|	|	3	|	|	|
Cancrum Oris .. .. .	|	|	|	|	|	|	|	|	1	|

**The figures for Toledo cover only the period May–December, 1938.

DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES		COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
99.	Other diseases of the arteries	—	—	—	—	5
100.	Diseases of the veins (varix, haemorrhoids, phlebitis, etc.)	—	—	—	5	—
	100:1. Varix	8	26	2	2	1
	100:2. Other diseases of the veins	3	10	3	—	—
101.	Diseases of the lymphatic system, lymphangitis, etc.)	2	—	3	1	—
102.	Abnormalities of blood pressure	1	—	—	—	—
	Hyperpiesis	5	4	—	1	—
103.	Other diseases of the circulatory system	—	—	—	—	—
	Epistaxis	—	2	—	—	—
VIII. Diseases of the Respiratory System.						
104.	Diseases of nasal fossae and annexa	—	—	—	—	—
	104:1. Diseases of the nose	25	6	9	1	4
	104:2. Diseases of the accessory nasal sinuses	3	3	—	1	—
105.	Diseases of the larynx	—	—	—	—	—
	105:1. Laryngismus stridulus	—	—	1	—	—
	105:2. Laryngitis	—	38	2	3	1
	105:3. Other diseases of the larynx	1	—	—	—	—
106.	Bronchitis	—	—	—	12	23
	106a. Acute bronchitis	25	131	44	38	1
	106b. Chronic bronchitis	13	28	14	9	2
107.	Broncho-pneumonia	5	96	—	6	6
108.	Lobar pneumonia	13	74	—	9	—
109.	Pneumonia	—	—	—	1	5
110.	Pleurisy	—	16	4	—	3
	110:2. Other pleurisy	11	—	—	—	—
112.	Asthma	13	76	13	14	6
113.	Pulmonary emphysema	1	—	—	—	—
114.	Other diseases of the respiratory system	—	—	—	—	—
	114b:1. Gangrene of the lung	—	—	—	—	—
	114b:2. Other diseases included under 114b	1	—	3	—	—
IX. Diseases of the Digestive System.						
115.	Diseases of the buccal cavity, pharynx, etc.	—	—	—	—	—
	115:1. Diseases of the teeth and gums	3	—	—	2	—
	Alveolar abscess	6	14	—	6	7
	Dental caries	47	72	—	18	65
	Gingivitis	3	4	1	11	14
	Pyorrhoea alveolaris	3	39	4	2	3
	Septic mouth	—	—	—	5	3
	Stomatitis	—	—	—	2	—
	115:3. Diseases of the tonsils	—	1	—	—	11
	Adenoids	1	2	—	—	—
	Enlargement of the tonsils	—	6	—	1	1
	Follicular tonsillitis	4	12	5	10	3
	Quinsy	2	—	1	—	—
	115:4. Other diseases included under 115	—	—	—	—	2
	Naso-pharyngeal catarrh	2	11	—	—	12
	Parotitis	—	—	—	3	—
	Vincent's angina	—	—	—	1	—
	Ulcer of Fauces	1	—	—	—	—
	„ Tongue	1	—	—	—	—

**The figures for Toledo cover only the period May—December, 1938.

DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
99. Other diseases of the arteries	—	—	—	—	—	—	—	—	—	—
100. Diseases of the veins (varix, haemorrhoids, phlebitis, etc.)	—	—	—	—	—	—	—	—	—	—
100:1. Varix	3	—	—	—	—	—	—	—	—	—
100:2. Other diseases of the veins	—	—	—	—	—	—	—	—	—	—
101. Diseases of the lymphatic system, lymphangi- tis, etc.)	—	—	—	—	—	—	—	—	—	—
102. Abnormalities of blood pressure	—	—	—	—	—	—	—	—	—	—
Hyperpiesis	—	—	—	—	—	—	1	—	—	—
103. Other diseases of the circulatory system	—	—	—	—	—	—	—	—	—	—
Epistaxis	—	—	—	—	—	—	—	—	—	—
VIII. Diseases of the Respiratory System.										
104. Diseases of nasal fossae and annexa	—	—	—	—	—	—	—	—	—	—
104:1. Diseases of the nose	—	—	—	—	—	—	—	—	—	—
104:2. Diseases of the accessory nasal sinuses	—	—	—	—	—	—	—	1	—	—
105. Diseases of the larynx	—	—	—	—	—	—	—	—	—	—
105:1. Laryngismus stridulus	—	—	—	—	—	—	—	—	—	—
105:2. Laryngitis	—	—	—	—	—	—	—	—	—	—
105:3. Other diseases of the larynx	—	—	—	—	—	—	—	—	—	—
106. Bronchitis	—	—	—	—	—	—	—	5	—	1
106a. Acute bronchitis	6	1	1	—	1	—	2	—	—	—
106b. Chronic bronchitis	3	—	—	—	—	—	1	—	1	—
107. Broncho-pneumonia	3	2	2	—	—	—	5	—	3	—
108. Lobar pneumonia	9	3	8	2	—	—	7	1	—	—
109. Pneumonia	—	—	—	—	—	—	—	—	3	3
110. Pleurisy	—	—	—	—	—	—	—	—	—	—
110:2. Other pleurisy	4	—	—	—	—	—	—	—	2	1
112. Asthma	2	—	3	—	—	—	1	—	—	—
113. Pulmonary emphysema	—	—	—	—	—	—	—	—	—	—
114. Other diseases of the respiratory system	—	—	—	—	—	—	—	—	—	—
Chronic intestinal pneumonia, including occupational diseases of the lung	—	—	—	—	—	—	—	—	—	—
114b:1. Gangrene of the lung	—	—	—	—	—	—	—	—	1	1
114b:2. Other diseases included under 114b	1	1	—	—	2	—	—	—	—	—
IX. Diseases of the Digestive System.										
115. Diseases of the buccal cavity, pharynx, etc.	—	—	—	—	—	—	—	—	—	—
115:1. Diseases of the teeth and gums	—	—	—	—	—	—	—	1	—	—
Alveolar abscess	2	—	—	—	—	—	1	—	—	—
Dental caries	—	—	—	—	—	—	—	—	1	—
Gingivitis	—	—	—	—	—	—	2	—	—	—
Pyorrhoea alveolaris	—	—	1	—	—	—	—	—	—	—
Septic mouth	—	—	—	—	—	—	—	—	—	—
Stomatitis	—	—	—	—	—	—	—	—	—	—
115:3. Diseases of the tonsils	—	—	—	—	—	—	—	—	—	—
Adenoids	—	—	—	—	—	—	—	—	—	—
Enlargement of the tonsils	—	—	—	—	—	—	—	—	—	—
Follicular tonsillitis	—	—	—	—	—	1	—	—	—	—
Quinsy	1	—	—	—	—	—	—	—	—	—
115:4. Other diseases included under 115	—	—	—	—	—	—	—	—	—	—
Naso-pharyngeal catarrh	—	—	—	—	—	—	—	—	—	—
Parotitis	—	—	—	—	—	—	—	—	—	—
Vincent's angina	—	—	—	—	—	—	—	—	—	—
Tongue	—	—	—	—	—	—	—	—	—	—

**The figures for Toledo cover only the period May–December, 1938.

DISTRICTS.

Total number of cases seen. (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
117. Ulcers of the stomach or duodenum	—	—	—	—	—
117a. Ulcer of the stomach	1	9	4	1	—
117b. Ulcers of the duodenum	—	1	—	1	2
118. Other diseases of the stomach	—	—	—	—	19
118:1. Inflammation of the stomach ..	4	7	30	3	—
118:2. Other diseases included under 118	—	—	1	—	—
Dyspepsia (age 2 and over)	25	33	24	18	1
119 & 120. Diarrhoea and enteritis	21	—	5	8	—
119 & 120a. Diarrhoea and enteritis ..	—	—	—	3	—
119 & 120a:1. Colitis	—	6	—	—	—
119 & 120a:2. Other diarrhoea and enteritis	—	—	—	—	—
Diarrhoea	7	94	2	5	6
Diarrhoea due to food	—	2	6	—	11
Dyspepsia (age under 2)	—	—	—	—	4
Enteritis	1	—	2	—	2
Infantile colic (under 2 years) ..	1	52	—	1	—
Infantile diarrhoea (under 2 years) ..	30	—	15	6	1
Infantile enteritis (under 2 years) ..	—	43	2	1	—
Mucous enteritis (under 2 years) ..	—	—	—	—	1
119 & 120b. Ulceration of the intestines	—	—	—	—	—
Ulcerative colitis	—	1	—	—	—
121. Appendicitis	3	1	2	1	1
122. Hernia, Intestinal obstruction	—	—	—	—	—
122a. Hernia	—	—	—	—	—
Femoral hernia	—	—	1	—	—
Inguinal hernia	2	—	1	5	5
Richter's hernia	—	—	—	—	—
Umbilical hernia	6	—	—	—	—
Ventral hernia	—	—	—	1	—
122b. Intestinal obstruction	—	—	—	1	—
123. Other diseases of the intestines	—	—	—	—	—
123:1. Constipation, Intestinal stasis ..	17	4	9	—	53
123:3. Other diseases included under 123	—	—	—	—	—
Fissure of anus	3	—	—	—	—
Fistula in ano	1	3	1	1	—
Haemorrhoids	—	—	—	—	3
Ischio-rectal abscess	1	1	—	—	—
Pruritis Ani	—	—	1	—	—
124. Cirrhosis of the liver	—	—	—	3	—
124a. Returned as alcoholic	—	—	—	1	—
124b. Not returned as alcoholic	3	9	2	1	—
125. Other diseases of the liver	—	—	—	—	—
125:1. Acute yellow atrophy	—	—	—	2	—
125:2. Other diseases included under 125	—	—	—	—	—
Acute hepatitis	2	—	—	—	—
Amoebic abscess of liver	—	—	1	1	—
Catarrhal Jaundice	—	—	—	1	—
Hepatitis	3	—	—	1	3
126. Biliary calculi	5	31	3	2	1
127. Other diseases of the gall bladder and ducts	1	2	—	—	—
127:1. Cholecystitis without record of	—	8	5	—	—
biliary calculi	—	—	1	—	—
127:2. Other diseases included under 127	—	—	—	—	—

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DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
117. Ulcers of the stomach or duodenum	—	—	—	—	—	—	—	—	—	—
117a. Ulcer of the stomach	—	—	—	—	—	—	—	—	—	—
117b. Ulcers of the duodenum	—	—	—	—	—	—	—	—	—	—
118. Other diseases of the stomach	—	—	—	—	—	—	—	—	—	—
118:1. Inflammation of the stomach	1	—	3	—	2	—	—	—	—	—
118:2. Other diseases included under 118 ..	—	—	—	—	—	—	—	—	—	—
Dyspepsia (age 2 and over)	—	—	2	—	—	—	1	—	—	—
119 & 120. Diarrhoea and enteritis	—	—	—	—	—	—	—	—	—	—
119 & 120a. Diarrhoea and enteritis	—	—	—	—	1	—	—	—	—	—
119 & 120a:1. Colitis	—	—	—	—	—	—	—	—	—	—
119 & 120a:2. Other diarrhoea and enteritis	1	—	—	—	1	—	—	—	—	—
Diarrhoea	1	—	—	—	—	—	—	—	—	—
Diarrhoea due to food	—	—	—	—	—	—	—	—	—	—
Dyspepsia (age under 2)	—	—	—	—	—	—	—	—	—	—
Enteritis	—	—	—	—	—	—	—	—	—	—
Infantile colic (under 2 years)	—	—	—	—	—	—	—	—	—	—
Infantile diarrhoea (under 2 years)	—	—	—	—	—	—	—	—	—	—
Infantile enteritis (under 2 years)	—	—	—	—	—	—	—	—	—	—
Mucous enteritis (under 2 years)	—	—	1	1	—	—	1	1	—	—
119 & 120b. Ulceration of the intestines ..	—	—	—	—	—	—	—	—	—	—
Ulcerative colitis	—	—	—	—	—	—	—	—	—	—
121. Appendicitis	—	—	—	—	1	—	—	—	1	—
122. Hernia, Intestinal obstruction	—	—	—	—	—	—	—	—	—	—
122a. Hernia	—	—	—	—	—	—	—	—	—	—
Femoral herna	—	—	—	—	—	—	—	—	1	—
Inguinal hernia	—	—	—	—	—	—	2	—	3	—
Richter's hernia	—	—	—	—	—	—	—	—	—	—
Umbilical hernia	—	—	—	—	—	—	—	—	—	—
Ventral hernia	—	—	—	—	—	—	—	—	—	—
122b. Intestinal obstruction	—	—	—	—	—	—	1	1	—	—
123. Other diseases of the intestines	—	—	—	—	—	—	—	—	—	—
123:1. Constipation, Intestinal stasis	—	—	—	—	—	—	—	—	—	—
123:3. Other diseases included under 123 ..	—	—	—	—	—	—	—	—	—	—
Fissure of anus	—	—	—	—	—	—	—	—	—	—
Fistula in ano	—	—	—	—	1	—	—	—	—	—
Haemorrhoids	—	—	—	—	—	—	—	—	2	—
Ischio-rectal abscess	—	—	1	—	—	—	1	—	—	—
124. Cirrhosis of the liver	—	—	—	—	—	—	2	—	—	—
124a. Returned as alcoholic	—	—	—	—	—	—	1	—	—	—
124b. Not returned as alcoholic	2	—	—	—	—	—	1	—	—	—
125. Other diseases of the liver	—	—	—	—	—	—	—	—	—	—
125:1. Acute yellow atrophy	—	—	—	—	—	—	1	—	—	—
125:2. Other diseases included under 125 ..	—	—	—	—	—	—	—	—	—	—
Acute hepatitis	2	—	—	—	—	—	1	—	—	—
Amoebic abscess of liver	—	—	—	—	—	—	—	—	—	—
Catarrhal Jaundice	—	—	—	—	—	—	—	—	—	—
Hepatitis	—	—	—	—	—	—	—	—	—	—
126. Biliary calculi	1	—	2	—	—	—	—	—	—	—
127. Other diseases of the gall bladder and ducts ..	—	—	—	—	—	—	—	—	—	—
127:1. Cholecystitis without record of	—	—	—	—	—	—	—	—	—	—
biliary calculi	—	—	—	—	—	—	—	—	—	—
127:2. Other diseases included under 127 ..	—	—	—	—	—	—	—	—	—	—

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DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
129. Peritonitis without stated cause	—	—	—	1	—
X. Non-Venereal Diseases of the Genito-Urinary System and Annexa.					
130. Acute nephritis	2	7	—	10	1
131. Chronic nephritis	3	37	8	4	—
132. Nephritis not stated to be acute or chronic ..	—	5	1	—	—
133. Other diseases of the kidney and annexa ..	—	—	—	—	—
133a. Pyelitis	2	3	1	—	—
133b. Other diseases included under 133	—	6	—	—	1
Bacilluria	—	—	—	2	—
Haematuria	—	—	—	1	—
134. Calculi of the urinary passages	—	—	—	—	—
134a. Calculi of kidney and ureter	1	2	—	—	—
134b. Calculi of the bladder	1	3	—	—	—
135. Diseases of the bladder	—	—	—	—	—
135a. Cystitis	7	15	6	9	22
135b. Other diseases of the bladder	—	1	2	—	4
136. Diseases of the urethra, urinary abscess, etc.	1	—	—	—	—
136a. Stricture of the urethra	2	7	1	8	2
136b. Other diseases of the urethra, etc. ..	—	—	—	—	—
Perineal abscess	—	1	1	2	1
137. Diseases of the prostate	—	—	—	—	—
Adenoma of prostate	—	—	2	2	1
Inflammation of prostate	—	1	—	—	—
138. Diseases of the male genital organs	2	—	—	—	1
Granuloma	—	1	—	—	—
Granuloma pudendorum	—	2	—	—	—
Hydrocele	—	10	—	2	1
Orchitis	2	14	4	2	1
Paraphimosis	—	1	1	—	—
Phimosis	2	1	—	—	1
139. Diseases of the female genital organs	—	—	—	1	1
139a:1. Diseases of the ovary	—	8	—	—	1
139a:2. Diseases of the Fallopian tube	1	—	4	—	2
139a:3. Diseases of the parametrium	—	—	—	1	—
139b. Diseases of the uterus	—	—	—	—	2
Amenorrhoea	1	1	1	3	4
Anteflexion of uterus	2	—	—	—	—
Cervicitis	2	25	—	—	—
Dysmenorrhoea	1	12	—	—	4
Endometritis	—	38	1	—	3
Erosion of cervix uteri	—	43	—	—	—
Leucorrhoea	3	4	—	—	—
Menopause	2	—	—	2	6
Menorrhagia	2	11	5	2	—
Metrorrhagia	1	—	1	2	1
Prolapse of uterus	—	1	1	—	1
Retroflexion of uterus	1	3	—	—	—
Retroversion of uterus	2	14	—	—	3
139c. Diseases of the breast	—	—	—	1	1
Cracked Nipple	—	—	—	3	—
Mammary abscess	4	2	—	1	1
Mastitis	—	2	—	—	1
139d. Other diseases of the female genital organs	2	—	—	—	—
Abscess of Bartholin's gland	1	4	—	—	—
Granuloma pudendorum	—	1	—	1	—

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DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
	129. Peritonitis without stated cause	—	—	—	—	—	—	1	1	—
X. Non-Venereal Diseases of the Genito-Urinary System and Annexa.										
130. Acute nephritis	1	—	1	—	—	—	5	—	—	—
131. Chronic nephritis	2	2	1	—	—	—	2	—	—	—
132. Nephritis not stated to be acute or chronic ..	—	—	2	—	1	1	—	—	—	—
133. Other diseases of the kidney and annexa ..	—	—	—	—	—	—	—	—	—	—
133a. Pyelitis	2	—	—	—	—	—	—	—	—	—
133b. Other diseases included under 133	—	—	—	—	—	—	—	—	1	—
Bacilluria	—	—	—	—	—	—	—	—	—	—
Haematuria	—	—	—	—	—	—	—	—	—	—
134. Calculi of the urinary passages	—	—	—	—	—	—	—	—	—	—
134a. Calculi of kidney and ureter	—	—	—	—	—	—	—	—	—	—
134b. Calculi of the bladder	—	—	—	—	—	—	—	—	—	—
135. Diseases of the bladder	—	—	—	—	—	—	—	—	—	—
135a. Cystitis	—	—	—	—	—	—	1	—	1	—
135b. Other diseases of the bladder	—	—	—	—	—	—	—	—	—	—
136. Diseases of the urethra, urinary abscess, etc.	—	—	—	—	—	—	—	—	—	—
136a. Stricture of the urethra	1	—	—	—	—	—	1	—	—	—
136b. Other diseases of the urethra, etc. ..	—	—	—	—	—	—	—	—	—	—
Perineal abscess	—	—	—	—	—	—	1	—	1	—
137. Diseases of the prostate	—	—	—	—	—	—	2	—	—	—
Adenoma of prostate	—	—	—	—	—	—	—	—	—	—
Inflammation of prostate	—	—	—	—	—	—	—	—	—	—
138. Diseases of the male genital organs	1	—	—	—	—	—	—	—	—	—
Granuloma	—	—	—	—	—	—	—	—	—	—
Granuloma pudendorum	—	—	—	—	—	—	—	—	—	—
Hydrocele	—	—	—	—	—	—	1	—	1	—
Orchitis	1	—	2	—	1	—	1	—	1	—
Paraphimosis	—	—	—	—	—	—	—	—	—	—
Phimosis	1	—	—	—	—	—	—	—	—	—
139. Diseases of the female genital organs	—	—	—	—	—	—	1	—	1	—
139a.1. Diseases of the ovary	—	—	—	—	—	—	—	—	1	—
139a:1. Diseases of the ovary	—	—	—	—	—	—	—	—	1	—
139a:2. Diseases of the Fallopian tube	1	—	—	—	1	—	—	—	—	—
139a:3. Diseases of the parametrium	—	—	—	—	—	—	1	—	—	—
139b. Diseases of the uterus	—	—	—	—	—	—	—	—	—	—
Amenorrhoea	—	—	—	—	—	—	—	—	—	—
Anteflexion of uterus	—	—	—	—	—	—	—	—	—	—
Cervicitis	—	—	—	—	—	—	—	—	—	—
Dysmenorrhoea	1	—	—	—	—	—	—	—	—	—
Endometritis	—	—	—	—	1	—	—	—	1	—
Erosion of cervix uteri	—	—	—	—	—	—	—	—	—	—
Leucorrhoea	1	—	—	—	—	—	—	—	—	—
Menopause	—	—	—	—	—	—	—	—	1	—
Menorrhagia	—	—	—	—	—	—	1	—	—	—
Metrorrhagia	—	—	—	—	—	—	—	—	—	—
Prolapse of uterus	—	—	—	—	—	—	—	—	1	—
Retroflexion of uterus	—	—	—	—	—	—	—	—	—	—
Retroversion of uterus	—	—	—	—	—	—	—	—	—	—
139c. Diseases of the breast	—	—	—	—	—	—	2	—	—	—
Mammary abscess	1	—	—	—	—	—	1	—	—	—
Mastitis	—	—	—	—	—	—	—	—	—	—
139d. Other diseases of the female genital organs	—	—	—	—	—	—	—	—	—	—
Abscess of Bartholin's gland	—	—	—	—	—	—	—	—	—	—
Granuloma pudendorum	—	—	—	—	—	—	—	—	—	—

**The figures for Toledo cover only the period May—December, 1938.

DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
XI. Diseases of Pregnancy, Childbirth and the Puerperal State.					
140. Post-abortive sepsis	—	1	—	3	—
141. Abortion not returned as septic	—	—	—	11	6
141:1. Haemorrhage following abortion	1	—	—	—	—
141:2. Without record of haemorrhage	1	—	—	—	—
142. Ectopic gestation	—	—	—	1	—
143. Other accidents of pregnancy	2	—	3	—	—
144. Puerperal haemorrhage	—	—	—	—	—
144a. Placenta praevia	—	—	1	—	—
144b. Other puerperal haemorrhage	1	—	—	—	—
145. Puerperal sepsis	—	—	—	3	2
145a. Puerperal septicaemia and pyaemia	—	1	—	2	2
146. Puerperal albuminuria and convulsions	—	—	—	—	—
146:1. Puerperal convulsions	1	—	—	—	—
146:2. Other diseases included under 146	—	—	—	—	—
Albuminuria of pregnancy	1	—	—	—	—
Nephritis of pregnancy	—	—	—	1	—
147. Other toxaeemias of pregnancy	—	—	6	1	9
Pernicious vomiting (females 15-45)	2	—	—	1	1
149. Other accidents of childbirth	1	6	2	—	—
150. Other or unspecified conditions of the puerperal state	—	—	—	—	—
150:1. Puerperal insanity	—	—	—	—	3
150:2. Puerperal diseases of the breast	—	—	—	1	—
150:3. Childbirth (unqualified)	7	5	1	74	1
Viable children born dead	—	—	—	4	2
Non-viable children born	—	—	—	3	—
XII. Diseases of the Skin and Cellular Tissue.					
151. Carbuncle, boil	10	6	3	9	2
152. Cellulitis, acute abscess	—	—	—	7	—
152:1. Cellulitis	18	—	1	23	8
152:2. Acute abscess	23	93	4	42	4
153. Other diseases of the skin and its annexa	6	—	—	1	—
Cheloid	1	—	—	—	—
Dermatitis	11	—	7	5	2
Eczema	15	42	7	3	4
Herpes	2	9	1	3	2
Ichthyosis	—	1	—	1	—
Impetigo contagiosa	—	1	1	11	25
Ingrowing toe-nail	—	4	—	1	—
Pediculosis	—	36	—	—	—
Psoriasis	1	—	—	—	—
Scabies	—	67	—	3	—
Sebaceous cyst	—	3	1	—	—
Seborrhoea	1	3	—	—	—
Septic dermatitis	1	—	2	4	—
Ulcer (unqualified)	9	417	4	70	14
Urticaria	3	8	1	2	—
Verruca	—	1	—	—	—
Pinta	—	—	—	4	—
XIII. Diseases of the Bones and Organs of Locomotion.					
154. Acute infective osteomyelitis and periostitis	—	—	—	—	3
155. Other diseases of the bones	1	—	—	—	—
Periostitis	—	—	—	—	—
Fracture	7	1	—	4	—

**The figures for Toledo cover only the period May—December, 1938.

DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDO	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
XI. Diseases of Pregnancy, Childbirth and the Puerperal State.										
140. Post-abortive sepsis	—	—	1	—	—	—	2	—	—	—
141. Abortion not returned as septic	—	—	—	—	—	—	5	—	1	—
141:1. Haemorrhage following abortion	1	—	—	—	—	—	—	—	—	—
141:2. Without record of haemorrhage	—	—	—	—	1	—	2	—	2	—
142. Ectopic gestation	—	—	—	—	—	—	1	—	—	—
143. Other accidents of pregnancy	1	—	—	—	2	—	—	—	—	—
Anaemic of pregnancy	—	—	—	—	—	—	1	—	—	—
144. Puerperal haemorrhage	—	—	—	—	—	—	—	—	—	—
144a. Placenta praevia	—	—	—	—	1	—	—	—	—	—
144b. Other puerperal haemorrhage	—	—	—	—	—	—	—	—	—	—
145. Puerperal sepsis	—	—	—	—	—	—	—	—	1	—
145a. Puerperal septicaemia and pyaemia	—	—	—	—	—	—	2	1	1	—
146. Puerperal albuminuria and convulsions	—	—	—	—	—	—	—	—	—	—
146:1. Puerperal convulsions	1	—	—	—	—	—	—	—	—	—
146:2. Other diseases included under 146	—	—	—	—	—	—	—	—	—	—
Albuminuria of pregnancy	—	—	—	—	—	—	—	—	—	—
Nephritis of pregnancy	—	—	—	—	—	—	—	—	—	—
147. Other toxaeemias of pregnancy	1	—	—	—	—	—	—	—	—	—
Pernicious vomiting (females 15–45)	—	—	—	—	—	—	—	—	—	—
149. Other accidents of childbirth	—	—	6	—	—	—	—	—	—	—
150. Other or unspecified conditions of the puerperal state	—	1	1	—	—	—	—	—	—	—
150:1. Puerperal insanity	—	—	—	—	—	—	—	—	2	—
150:2. Puerperal diseases of the breast	—	—	—	—	—	—	—	—	—	—
150:3. Childbirth (unqualified)	4	—	4	—	1	—	57	—	3	—
Viable children born dead	1	1	—	—	—	—	—	—	—	—
Non-viable children born	—	—	—	—	—	—	—	—	—	—
XII. Diseases of the Skin and Cellular Tissue.										
151. Carbuncle, boil	—	—	—	—	—	—	—	—	—	—
152. Cellulitis, acute abscess	—	—	—	—	—	—	1	—	1	—
152:1. Cellulitis	2	—	—	—	—	—	2	—	3	—
152:2. Acute abscess	2	—	2	—	2	—	9	—	1	—
153. Other diseases of the skin and its annexa	1	—	—	—	—	—	—	—	—	—
Cheloid	—	—	—	—	—	—	—	—	—	—
Dermatitis	—	—	—	—	—	—	—	—	—	—
Eczema	—	—	2	—	—	—	—	—	—	—
Herpes	—	—	1	—	—	—	1	—	1	—
Ichthyosis	—	—	—	—	—	—	—	—	—	—
Impetigo contagiosa	—	—	—	—	—	—	1	—	—	—
Ingrowing toe-nail	—	—	—	—	—	—	—	—	—	—
Pediculosis	—	—	—	—	—	—	—	—	—	—
Pinta	—	—	—	—	—	—	—	—	—	—
Psoriasis	1	—	—	—	—	—	—	—	—	—
Scabies	—	—	—	—	—	—	—	—	—	—
Sebaceous cyst	—	—	—	—	—	—	—	—	—	—
Seborrhoea	—	—	—	—	—	—	—	—	—	—
Septic dermatitis	—	—	—	—	1	—	—	—	—	—
Ulcer (unqualified)	1	—	3	—	1	—	2	—	1	—
Urticaria	—	—	—	—	—	—	—	—	—	—
Verruca	—	—	—	—	—	—	—	—	—	—
XIII. Diseases of the Bones and Organs of Locomotion.										
154. Acute infective osteomyelitis and periostitis	—	—	—	—	—	—	—	—	2	—
155. Other diseases of the bones	4	—	—	—	—	—	—	—	—	—
Periostitis	—	—	—	—	—	—	—	—	1	—
Fracture of Bone	—	—	1	—	—	—	—	—	1	1

**The figures for Toledo cover only the period May–December, 1938.

DISTRICTS.

Total number of cases seen, (In-Patients, Out-Patients and District Patients) during the period April–December, 1938.

Figures refer to the International List of The Causes of Death (1929 Revised).

DISEASES	COROZAL	CAYO	ORANGE WALK	STANN CREEK	TOLEDO
156. Diseases of the joints and other organs of locomotion	—	—	—	—	—
156a. Diseases of the joints	11	1	1	—	1
156b. Diseases of other organs of locomotion	—	—	—	4	—
Bursitis	—	1	—	1	—
Ganglion	—	3	1	1	—
Pes valgus	1	—	—	—	—
Torticollis	—	3	—	2	—
XIV. Congenital Malformations.					
157. Congenital malformations	—	—	—	—	—
157e:2. Cleft palate, harelip	—	—	—	2	—
157e:4. Other stated congenital malformations	1	—	—	—	—
XV. Diseases of Early Infancy.					
158. Congenital debility	—	2	—	—	1
Marasmus	3	1	—	2	2
159. Premature birth	2	—	—	6	—
160. Injury at birth	—	—	—	—	—
Breech presentation	—	—	—	—	2
Cerebral haemorrhage (due to injury at birth)	1	—	—	—	—
161. Other diseases peculiar to early infancy ..	—	—	3	—	6
XVI. Old Age.					
162. Old age	—	—	—	—	—
162a. Senile dementia	1	—	—	—	—
162b. Other forms of senile decay	2	29	1	3	1
174. Homicide by cutting or piercing instruments	1	—	—	—	—
176. Attack by venomous animals	—	—	—	6	—
Insect bite	—	—	—	—	—
179. Other acute accidental poisoning (not by gas)	1	—	—	—	—
180. Conflagration	1	—	—	—	1
181. Accidental burns (conflagration excepted) ..	5	1	1	1	—
184. Accidental injury by firearms	3	1	—	—	—
185. Accidental injury by cutting or piercing instruments	38	18	6	76	8
186. Accidental injury by fall, crushing, etc. ..	18	10	1	12	1
187. Cataclysm	—	3	—	2	1
188. Injury by animals (poisoning by venomous animals excepted)	8	—	—	4	—
194. Other and unstated forms of accidental violence	—	—	—	—	—
194:1. Inattention at birth	—	—	—	—	—
194:2. Other causes included under 194	—	—	33	1	—
XVIII. Ill-Defined Diseases.					
200. Cause of death unstated or ill-defined	1	—	—	16	—
Attempted Rape	—	—	—	—	—
Avitaminosis	—	—	1	—	—
General Debility	—	—	—	—	—
Total	2295	4,700	905	2,337	1,783

**The figures for Toledo cover only the period May–December, 1938.

DISTRICT HOSPITALS.

Returns of Diseases and Deaths (In-Patients) for
the period April–December, 1938.*Figures refer to the International List of The Causes of Death (1929 Revised).*

DISEASES	COROZAL		CAYO		ORANGE WALK		STANN CREEK		TOLEDÓ	
	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths	Admissions	Deaths
156. Diseases of the joints and other organs of locomotion	—	—	—	—	—	—	—	—	—	—
156a. Diseases of the joints	2	—	1	—	—	—	—	—	1	—
156b. Diseases of other organs of locomotion	—	—	—	—	—	—	—	—	—	—
Bursitis	—	—	—	—	—	—	—	—	—	—
Ganglion	—	—	—	—	—	—	—	—	—	—
Pes valgus	—	—	—	—	—	—	—	—	—	—
Torticollis	—	—	—	—	—	—	—	—	—	—
XIV. Congenital Malformations.										
157. Congenital malformations	—	—	—	—	—	—	—	—	—	—
157e. 2. Cleft palate, harelip	—	—	—	—	—	—	—	—	—	—
157e. 4: Other stated congenital malformations	—	—	—	—	—	—	—	—	—	—
XV. Diseases of Early Infancy.										
158. Congenital debility	—	—	1	—	—	—	—	—	—	—
Marasmus	—	—	—	—	—	—	2	2	—	—
159. Premature birth	2	—	—	—	—	—	5	1	—	—
160. Injury at birth	—	—	—	—	—	—	—	—	—	—
Breech presentation	—	—	—	—	—	—	—	—	2	1
Cerebral haemorrhage (due to injury at birth)	1	1	—	—	—	—	—	—	—	—
161. Other diseases peculiar to early infancy	—	—	—	—	—	—	—	—	—	—
XVI. Old Age.										
162. Old age	—	—	—	—	—	—	—	—	—	—
162a. Senile dementia	1	—	—	—	—	—	—	—	—	—
162b. Other forms of senile decay	1	—	3	—	—	—	2	1	—	—
174. Homicide by cutting or piercing instruments	—	—	—	—	—	—	—	—	—	—
176. Attack by venomous animals	—	—	—	—	—	—	—	—	—	—
Insect bite	—	—	—	—	—	—	—	—	—	—
179. Other acute accidental poisoning (not by gas)	—	—	—	—	—	—	—	—	—	—
180. Conflagration	—	—	—	—	—	—	—	—	—	—
181. Accidental burns (conflagration excepted)	1	1	—	—	—	—	—	—	—	—
184. Accidental injury by firearms	3	—	1	—	—	—	—	—	—	—
185. Accidental injury by cutting or piercing instruments	10	—	11	—	1	—	5	—	3	—
186. Accidental injury by fall, crushing, etc.	3	—	8	—	—	—	5	—	—	—
187. Cataclysm	—	—	3	—	—	—	—	—	1	—
188. Injury by animals (poisoning by venomous animals excepted)	—	—	—	—	—	—	—	—	—	—
192. Lightning	—	—	—	—	—	—	—	—	—	—
194. Other and unstated forms of accidental violence	—	—	—	—	—	—	—	—	—	—
194:1. Inattention at birth	—	—	—	—	—	—	—	—	—	—
194:2. Other causes included under 194	1	—	—	—	11	—	—	—	—	—
XVIII. Ill-Defined Diseases.										
200. Cause of death unstated or ill-defined	—	—	—	—	—	—	—	—	—	—
Attempted Rape	—	—	—	—	—	—	—	—	—	—
Avitaminosis	—	—	—	—	—	—	1	1	—	—
Debility	—	—	—	—	—	—	—	—	—	—
Total	198	21	192	8	76	1	501	20	186	20

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